1992

A Study of Virginia Public-school Affiliated GED Instructors Who Teach Writing Skills for the Essay Component of the GED Writing Skills Test

Rodger Leonard Doss

School of Education
Virginia Commonwealth University

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A Study of Virginia Public-School Affiliated GED Instructors
Who Teach Writing Skills for the Essay Component
of the GED Writing Skills Test

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dissertation requirement for the degree of Doctor of Philosophy.

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Committee Member   Pass   Fail

Committee Member   Pass   Fail

Committee Member   Pass   Fail

Director, Ph.D. Program   Pass   Fail

Dean, School of Education   Pass   Fail

7-23-92
Date

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

by

Rodger Leonard Doss

B.A., Bridgewater College, 1971
M.A., Virginia State University, 1980

Dissertation Director: John R. Pisapia, Ed.D.
School of Education

Virginia Commonwealth University
Richmond, Virginia

July, 1992

Acknowledgments

I wish to acknowledge the contributions of the many persons who have helped me with the development of this dissertation. Without their continued support, this work could not have been realized.

My sincere gratitude and appreciation are extended to Dr. Ron Sherron, my advisor and chairman of my dissertation committee. Although ill health prevented him from directing the dissertation to its conclusion, his advice and guidance throughout my coursework, prospectus preparation, and early dissertation development were invaluable. I thank him and wish him the very best.

I deeply appreciate the valuable assistance provided by my committee members as the idea and reality of the dissertation developed and progressed. Dr. Lennox McLendon helped me to understand much about the structure, organization, and operation of adult education programs in Virginia. Dr. Nancy Boraks helped me to conceptualize a theoretical framework for the study and helped me to view ideas, issues, and problems more holistically and globally. Dr. Kathy Cauley's guidance through the statistical procedures and her recommendations for organizing and editing the findings section were invaluable and sincerely appreciated. And Dr. Jack Hartnett's suggestions for the overall improvement of text clarity and form and

his support and encouragement throughout the dissertation process are gratefully acknowledged.

I wish to especially thank Dr. John Pisapia who, regardless of his many administrative and teaching responsibilities, agreed to serve as my acting dissertation director and committee chairman and to see me through the completion of the dissertation process.

Although numerous individuals within the School of Education at VCU have contributed to my education, professional growth, and development, there are several persons to whom I am especially indebted. I will be forever grateful to Dr. Michael Davis for employing me first as his graduate assistant and then for several years as a project director. I am also very grateful to Dr. John Oehler for employing me as his special assistant. Not only did these two individuals afford me the means to pursue my doctoral studies, but from them I learned a great deal about personal interaction skills, project administration, teaching, and the politics of higher education. I also extend warm and heart-felt thanks to Dr. Patricia Duncan who always had time to listen to and discuss my ideas, problems, and questions, and to share a little humor with me. I thank Dr. Alan McLeod for his friendliness, warmth, caring attitude, and for all of his support and help. And finally, I sincerely thank Dr. Jack Duncan for his sound advice, professional judgment, and administrative support which helped me make informed decisions about the direction of my program.

I am grateful to several other professionals who provided assistance with this work. Claiborne Leonard, former Chief GED Examiner for the Commonwealth of Virginia, helped me identify the teachers used in this study. Dr. Connie Coogle, my statistical

consultant, was enormously helpful with the design of the research instrument, interpretation of the statistical results, and explanations to all of my questions related to statistical procedures. And my typist, Sally Companion, was indispensable with her excellent skills and tolerance for my numerous revisions. My sincere thanks to each of you.

Finally, I want to thank my classmates in the entering class of 1986, especially John, Peggy, Judy, and Paul, who were always ready to give of their time and energies for the success of us all.

Dedication

This work is dedicated to my parents, Harry L. and Bettie R. Doss. Their love and support have always been a source of strength for all of the personal endeavors of my life. I deeply thank them for all they have done for me.

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Abstract

A STUDY OF VIRGINIA PUBLIC-SCHOOL AFFILIATED GED
INSTRUCTORS WHO TEACH WRITING SKILLS FOR THE ESSAY
COMPONENT OF THE GED WRITING SKILLS TEST

Rodger Leonard Doss

School of Education - Virginia Commonwealth University, 1992

Director of Dissertation: Dr. John R. Pisapia

The purpose of this study was to determine the demographic
characteristics, instructional approach, perceptions toward inservice
training, and awareness and use of adult education theory/principles of
public-school affiliated GED instructors in Virginia who teach writing
skills for the essay component of the GED Writing Skills Test. An
additional purpose of the study was to compare student performance
on a sample of GED essays to determine the relationship of student
performance with teacher demographic characteristics and teacher
instructional approach as identified by the product and process scale
scores.

The GED teachers who participated in the study were identified
through the cooperation of the Office of Adult Education of the
Virginia Department of Education. Of the 169 teachers identified, 113
of them returned survey questionnaires which could be used for data

analysis. Only GED programs that were offered through Virginia public schools and reimbursed through state General Adult Education Funds of the Office of Adult Education were used for this study.

Descriptive statistics were used to analyze the data on teacher demographics, instructional approach, scale scores, students' essay test scores, and perceptions toward inservice training for the essay component and the awareness and use of adult learning theory/principles in the GED classroom.

Inferential statistics were used to determine significant relationships between groups of teachers in terms of their demographic variables, and between groups of teachers classified as scoring high or low on the scale scores in terms of students' mean essay scores. Also, inferential statistics were used to compare teachers' product and process group membership as defined by scale scores with their self-report classifications and to determine which teacher demographic variables were useful to predict product and process scale scores and student averaged essay test scores.

Among the results indicated by the study were: many teachers who identified themselves as using a combination of the product and process approaches to the teaching of writing skills to adults were not categorized as such by the scale scores; respondents from the surveyed population of GED instructors appeared to be more product-oriented in their approach to teaching writing; teachers appear to move away from a strictly product-orientation toward more of a process-orientation as they gain more years of GED teaching experience and as they spend more time with the students; it was inconclusive whether or not any of the approaches to teaching writing

skills for the essay component (product, process, or combination) as identified in this study were any better than any of the other approaches; these GED teachers want inservice training to address the addition of the essay component to the Writing Skills Test; and, these teachers appear to have a good understanding of adult education theory/principles and they appear to employ these principles in their classrooms.

Recommendations for future research are presented; these involve conducting a state-wide needs analysis to explore what GED teachers need to become more comfortable about teaching writing skills for the essay component; examining more closely the classroom practices of GED teachers who teach writing skills; and, using larger samples and different sampling techniques.

CHAPTER I

INTRODUCTION

Statement of Problem

In 1982, the General Educational Development Testing Service (GEDTS) in conjunction with the American Council on Education (ACE) began a five-year review process of the Tests of General Educational Development (GED). The purpose of the review process was to gather data to be utilized as a basis for the development of the content of the new GED Tests which would be introduced in 1988 (GEDTS, 1985).

The GED Test Specifications Committee made numerous recommendations for changes to the GED Test. Principal among those recommendations were that the new GED Test should require more from the examinees in terms of high school level thinking and problem-solving skills; the new tests should emphasize the relationship of the skills to aspects of the work world; within the context of the GED tests, particular consumer skills should be addressed; and, the tests should focus on settings recognized by adult examinees (GEDTS, 1985).

A further recommendation of the GED Test Specifications Committee was that the Writing Skills Test of the GED Test battery should include an essay component. The writing sample would be added as a direct method of measuring writing skills. The old method

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of indirect measurement of writing skills through a multiple choice test format would not be abandoned, however. The new GED Writing Skills Test would utilize both methods to determine the writing skills of the learner. After most of the GED Test Specifications Committee recommendations were approved in 1984 by the Commission on Educational Credit and Credentials, the essay component was approved as an addition to the Writing Skills Test in September, 1985.

Patience and Auchter (1988) report that nearly 750,000 individuals in the United States, Canadian provinces, and United States and Canadian territories take the GED Test annually. Of these, almost 500,000 earn the GED credential. Additionally, they observe that nearly one in seven high school completion credentials awarded in the United States is a GED credential.

With the adoption of the essay component to the Writing Skills Test, at least two realizations have become very evident to many adult educators. First, every examinee will be required to write an essay as part of the new GED Writing Skills Test. Second, many GED instructors will need some inservice training in teaching writing instruction for the essay component and in adult learning theory and practices. These realizations have resulted in formidable challenges to adult education administrators, instructors, and students. No longer must writing instruction be considered a subordinate or additional instructional activity for GED Test preparation; it must now be directly addressed through inservice training program planning, teacher instructional strategy preparation, and student and teacher active involvement in the writing act.

The addition of the essay component to the Writing Skills Test must ultimately necessitate inservice training for GED instructors who must teach writing instruction to adults in their GED classes. Jorgenson (1988) notes that few Adult Basic Education (ABE) instructors currently have acquired the necessary methods and techniques needed to adequately teach the writing process. The very nature of the inservice training to be provided to these teachers has generated great concern. Many questions about the content and support of inservice training programs have surfaced. In addition to basic concerns over such issues as the nature of writing theory and philosophy, curriculum development, method of delivery, instructional strategies, and the nature of the adult learner, some adult educators believe that inservice training for the new GED Writing Skills Test should possibly be extended to include logistical and psychological support for teachers (Padak & Padak, 1988).

There is currently no organized national policy for providing inservice training to adult educators to address these concerns, and there is none in formulation. Programs to meet these concerns need to be developed and implemented by state and local organizations. This study surveyed Virginia public-school affiliated GED instructors who teach writing skills for the essay component of the GED Writing Skills Test to gather data that may be useful in the development of future inservice training for these teachers within the Commonwealth of Virginia.

Rationale

This state study of Virginia public-school affiliated GED instructors who teach writing skills for the essay component of the

GED Writing Skills Test may provide useful information to state and local GED administrators, program planners, curriculum developers, and adult education instructors. The results of the study may give these individuals a better understanding of the instructional approaches, perceptions toward inservice training, and use of adult learning theory/practices of Virginia public-school affiliated GED instructors who teach writing skills for the essay component of the Writing Skills Test. In turn, this enhanced knowledge may well serve as a touchstone for further refinement, modification, or development of state and/or local inservice training programs. These results may ultimately lead to new or better inservice programs, improved instructional practices, and increased student performance on the essay component of the Writing Skills Test.

Statement of Purpose

The purpose of this study was to determine the demographic characteristics, instructional approach, perceptions toward inservice training, and awareness and use of adult education theory/principles of public-school affiliated GED instructors in Virginia who teach writing skills for the essay component of the GED Writing Skills Test. An additional purpose of the study was to compare student performance on a sample of GED essays to determine the relationship of student performance with teacher demographic characteristics and teacher instructional approach as identified by the product and process scale scores.

Related Literature

Three areas of literature and research related to writing instruction for adults and the essay component of the GED Writing

Skills Test served as the theoretical framework for this study: writing theory, adult learning theory and staff development theory.

Writing Theory

The importance of writing instruction has recently received much renewed attention within the educational community. Much of this attention can be directly related to the desire of some public school systems to implement writing-across-the-curriculum programs and the inclusion of a writing sample as a requirement for high school graduation. Writing, then, has begun to come into its own as a discipline which fosters learning and critical thinking. As more educators discover the usefulness of writing as a learning tool in itself, writing has become less of a subordinate activity in the classroom.

As Freedman, Dyson, Flower, and Chafe (1987) indicate, early writing research focused on the final product. Instructors concentrated on teaching writing rules and principles covering grammar, rhetoric, and usage. Evaluation of writing ability often centered on whether a student could correct or edit someone else's writing by applying the rules. The belief was that mastery of the rules of correct writing would enable a student to produce his/her own good writing. Bayer (1986) calls this approach the bottom-up or reductionist model of language learning and indicates that, in this model, writing is viewed as a set of discrete skills to be mastered individually. She adds that when viewed this way, writing instruction is a hierarchical set of skills where moving up to the next level indicates mastery of all the previous levels. And Hairston (1982) calls this product approach the "traditional paradigm" (p. 78). She indicates that supporters of the traditional paradigm have three

underlying beliefs: (1) that good writers know what they are going to say before they begin to write, so writing is just a matter of finding the correct form for their expression; (2) that composing is a linear and systematic act that moves from prewriting to writing to rewriting; and, (3) that the teaching of editing is the teaching of writing. Product research, then, has focused on measuring the components of writing to make an assessment of the overall quality of a composition or to determine a writer's ability or maturity.

This focus on the end product of writing was gradually replaced by an emphasis on the composing process. The process approach centers on the developmental aspects of writing. Among the many proponents of the process approach to writing are Flower and Hayes (1977) who stress the problem-solving nature of writing and view many writing problems as thinking problems. Flower and Hayes (1983, 1987) believe in a cognitive model of the writing process which is composed of the three processes of planning, sentence generation, and revising. Respectively, these three stages are characterized by the writer first generating ideas and then organizing them into a plan; then, producing formal sentences to be read by an audience, and, finally, evaluating and improving the written composition. These three stages or processes are not linear, but recursive. A writer, then, freely moves back and forth and in and out of these three processes until the composition is completed. The focus is on the whole piece of writing and how it develops and not on writing's constituent parts.

Within the process approach, there has recently been an appreciable amount of research conducted on the social context of

writing. In the works of Moffett (1968, 1981) and Kinneavy (1971), writing is important as a means of communication to the reader. Also important is the purpose of writing and the writer's sense of audience. For Heath (1982) and Vygotsky (1978) writing is important within the social context because writing helps individuals to not only function within their society, but to also acquire the meaning and relevance of their culture.

The New GED Writing Skills Test

In 1983 the GED Testing Service began a five-year review process of the GED Test battery for the purpose of making recommended changes to guide the content of the tests for 1988 and beyond. A principal recommendation was that an essay component should be added to the Writing Skills Test. Numerous research studies and pilot projects were initiated to test whether an essay component could be successfully administered and scored in local test centers with an acceptable degree of test reliability and validity. Among these pilot programs was the Iowa GED Writing Skills Pilot Project (Hartwig, 1985). The results of this project were instrumental in the decision of the GEDTS to revise the Writing Skills Test to include an essay component.

To a great extent, the addition of an essay component to the Writing Skills Test has precipitated a renewed interest in writing instruction in general, and in writing instruction for adults in particular. Wangberg and Reutten (1986) advocate a "whole language approach" for developing and evaluating basic writing ability. In this approach, reading and writing abilities are developed together and not as separate skills utilizing the adult's life experiences and own

language as material for instruction. Fadale and Hammond (1987) developed a resource tool for ABE and GED teachers in New York State to address their students' functional writing needs and their GED essay needs. They developed a curriculum outline based on intended learning outcomes for adult writers. Teachers could draw upon the outline as necessary for class instruction. As Padak and Padak (1988) note, the change in the GED Writing Skills Test should result in even more attention to writing instruction for adults.

Adult Learning Theory

Adult learning theory suggests that roles and stages of development are important factors in the process of adult learning. As adults move through their life stages, their interests, and consequently, their needs change. Although studies by numerous researchers indicate that the adult development stages, roles, and tasks are somewhat standard, Wortley and Amatea (1982) indicate that adult developmental tasks are not related solely to biological age, but also include a variety of complex personal, environmental, and societal factors.

Many of the assumptions that form the foundation of adult learning theory have been contributed by Knowles (1970, 1980). M. J. Even (1987) observes that the roots of adult learning theory come from the work done in the field of phenomenology, cognitive development, Gestalt learning theory, existentialism, and from the interdisciplinary contributions of educational psychology, linguistics, psychology, human development, neurology, and neurophysiology.

Concepts of adult learning theory are also rooted in the goals of humanistic education, the main focus of which is man as an individual

(Al-Shehri, 1986). In humanistic education, the focus is on the learner rather than on the information to be learned. The teacher becomes a facilitator of learning, and the act of learning stems from the interests, attitudes, and personal goals of the learner. Motivation for learning becomes more intrinsic than extrinsic.

Numerous assumptions of adult learning theory which include that adults learn through an interaction process, they must share in decisions about learning content, and they must set their own goals and the contributions from the various fields of learning have definite implications for adult education program planners, staff developers, and GED instructors as they think about planning adult instructional practices (Even, 1987).

Staff Development Theory

Inservice program planners and other GED staff developers are currently being called upon by ABE and GED instructors, administrators, and other adult educators to prepare to meet the new challenges of training initiated by the new GED Writing Skills Test. Jorgenson (1988) notes that some states have already begun requiring inservice training to help instructors meet this new challenge. Adult educators warn, however, that staff development for adult educators must be considered from a perspective that is different from staff development for children's education. One suggestion is that staff development use a more horizontal community-oriented approach which stresses empowerment of the participants to direct their own development rather than the familiar vertical, bureaucratic model (Dallelew & Martinez, 1988). Most adult educators suggest that any program of staff development designed to train adults to teach other

adults should use principles of adult learning theory to facilitate the learning (Moore, 1988). Additionally, other adult educators suggest that the planning and managing of inservice education for ABE and GED instructors for the GED Writing Skills Test is enhanced if the trainers are knowledgeable of the requirements of the test; knowledgeable of the writing skills needed by the candidates to perform satisfactorily on the test; able to develop and conduct workshops to impart these knowledges; and able to provide ongoing support to the teachers that are trained (Hammond & Mangano, 1986).

Research Questions

Based on the review of literature, the following research questions are posed for this study:

1. What are the demographic characteristics of: (a) the respondents from the defined population of GED instructors in Virginia who teach writing skills for the essay component of the Writing Skills Test, (b) the sub-group of teachers who identified students who were first-time test takers of the GED Test in December 1990; and, (c) do these teachers differ significantly in terms of their demographic characteristics?

2. (a) What instructional approach to the teaching of writing for the essay component do these GED teachers identify themselves as using; and, (b) how do these GED teachers score on the product and process scales?

3. What is the relationship between selected teacher demographics and the instructional approach of the GED teachers as defined by the scale scores?

4. What is the relationship between selected teacher demographics and student performance on the essay component?

5. What is the relationship between student performance on the essay component and GED teacher instructional approach as defined by the scale scores?

6. What are the perceptions of the GED teachers toward inservice training for the essay component?

7. What are the perceptions of the GED teachers toward an awareness and use of adult learning theory/principles in the GED classroom?

Methodology

This study used a non-experimental, descriptive design to determine the demographic characteristics, instructional approach, perceptions toward inservice training, and awareness and use of adult education theory/principles of public-school affiliated GED instructors in Virginia who teach writing skills for the essay component of the GED Writing Skills Test. This study also compared student performance on a sample of GED essays to determine the relationship of student performance with teacher demographic characteristics and teacher instructional approach as identified by the process and product scale scores.

The subjects of this study consisted of the 113 respondents from the surveyed population of 169 Virginia public-school affiliated GED instructors who teach writing skills for the essay component of the Writing Skills Test either as part of a GED combination class or as a class unto itself and whose GED program is reimbursed through General Adult Education Funds of the Office of Adult Education of

Virginia's Department of Education. For some analyses, data from a sub-group of 30 teachers who identified to the researcher their students who were first-time GED test takers in December 1990 were utilized.

A five-part survey questionnaire was developed by the researcher to elicit teacher responses in the areas of demographic data, instructional approach, perceptions toward inservice training for the essay component, awareness and use of adult education theory/ principles in the GED classroom, and student identification. A group of six highly knowledgeable professional adult educators in the state reviewed the instrument to help assure its content validity.

The revised instrument was field tested with a group of seven GED instructors who teach writing skills for the essay component of the Writing Skills Test. After further revision of the instrument, packets containing an introductory letter from the researcher, a cover letter from both the Associate Director of the Office of Adult Education and the Chief GED Examiner for Virginia, the survey questionnaire, and a stamped return envelope were sent to each of the 169 identified teachers.

Descriptive statistics which included frequencies, means, percentages, and standard deviations were used to analyze the data on teacher demographics, teacher self-report instructional approach, product and process scale scores, students' averaged essay test scores, teacher perceptions toward inservice training for the essay component, and teacher perceptions about the awareness and use of adult learning theory/principles in the GED classroom.

Inferential statistics utilized included Analysis of variance (ANOVAs), Chi-squares, and Stepwise Multiple Regression Analysis. ANOVAs were used to determine if statistically significant differences existed between: (1) groups of teachers in terms of their continuous demographic variables; and (2) groups of teachers who were classified as scoring high or low on the product and process scales in terms of their students' mean essay scores.

Chi-square statistics were used: (1) to determine if the sub-group of teachers who identified students was statistically equivalent to the group of teachers who did not identify students in terms of categorical demographic variables; and, (2) to compare the teachers' product and process group membership as defined by scale scores with their self-report classifications to determine how many teachers used a combination instructional approach based on scale score classifications.

The Stepwise Multiple Regression Analysis Method was used: (1) to determine which teacher demographic variables were useful to predict product scale scores, (2) to determine which teacher demographic variables were useful to predict process scale scores; and, (3) to determine which teacher demographic variables were useful to predict student averaged essay test scores.

In order to obtain an estimate of the reliability of the product and process scales, Cronbach Alpha coefficients were computed for both scales from the responses of teachers within the identified population who responded to all scale items.

Summary

With the addition of the essay component to the GED Writing Skills Test, a heightened concern has arisen from adult educators as to whether GED instructors are prepared to teach writing skills for this new test addition. Many of these GED teachers do not have an adequate understanding of the skills, techniques, and strategies necessary to teach writing instruction to adults. Much of the training necessary to help these teachers must be carried out by state and local organizations through inservice training and staff development programs.

The purpose of this study is to help develop a stronger foundation for future inservice training of GED instructors who teach writing skills for the essay component of the new Writing Skills Test. This study surveyed Virginia public-school affiliated GED instructors who teach writing skills for the essay component to determine their demographic characteristics, instructional approach, perceptions about inservice training for the essay component, and their awareness and use of adult learning theory/principles in the GED classroom. Additionally, this study also compared student performance on a sample of GED essays to determine the relationship of student performance with teacher demographics and teacher instructional approach as identified by the product and process scale scores.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The instructional practices and the inservice training of GED instructors who teach writing skills for the essay component of the new GED Writing Skills Test have recently become issues of increased concern among adult educators. The addition of this essay component has prompted numerous GED instructors and program administrators to voice their beliefs of a lack of adequate training and strategies to teach the appropriate techniques and skills necessary to meet the challenge of this new test addition. In the United States, the responsibility for addressing these heightened concerns rests primarily with each individual state. This study has explored how Virginia public-school affiliated GED teachers perceive these issues and how they are meeting this challenge in the classroom. The approach taken to this literature review utilized three theoretical frameworks: writing theory, adult learning theory, and staff development theory.

This study sought to determine instructional practices and approaches currently utilized by Virginia public-school affiliated GED teachers who teach writing skills for the essay component of the GED Writing Skills Test and to determine, to some extent, the success of these approaches. It also sought to determine if these teachers

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incorporate principles of adult learning theory into their instruction. Additionally, this study attempted to determine the perceptions of these teachers about inservice training to address the essay component issue. Only Virginia GED teachers who taught in a Virginia public-school affiliated GED program, who taught writing skills for the essay component either as part of a GED combination class or as a separate class unto itself, and whose program is reimbursed through General Adult Education Funds of the Office of Adult Education of the Commonwealth of Virginia's Department of Education were included in this study. Only the essays of adult learners who had been identified as students of these GED teachers and who were initial GED test-takers in December 1990 were used for statistical analysis.

It is the purpose of this chapter to provide a review of literature on the development of the addition of the essay component to the GED Writing Skills Test, the nature of the essay component, writing theory, adult learning theory, and staff development theory.

Background

On January 2, 1988 the revised GED Tests were first administered in the United States and in two U.S. territories (Whitney, 1988). The introduction of these new tests marked the first revision of the GED Tests since 1978, and was the culmination of a five-year review process begun in 1983. A GED Test's Specifications Committee was formed in February 1984 to draw up a list of recommendations which would be used to guide the content of the GED Tests for 1988 and beyond (GEDTS, 1985). The Committee made several recommendations to the Commission on Educational Credit and Credentials of the GED Testing Service. One of the chief

recommendations was that the Writing Skills Test should include an essay component. However, further research was needed before any final decision was to be made. Additional research was conducted concerning the correlations between the essay, a direct measure of writing ability, and the multiple choice component, an indirect measure of writing ability (Swartz & Whitney, 1985). It was discovered that even though there was a strong relationship between the two, they did measure related but different skills. Also, research was conducted concerning reliability and validity issues of adding an essay to the Writing Skills Test (Swartz, Patience, & Whitney, 1985). They reported that it was "technically feasible" to include an essay component in the revised GED Writing Skills Test (Swartz et al., 1985, p. 12).

Swartz and Whitney (1987) note that a score from a single, direct measure of writing is not sufficiently reliable to make a critical decision on an individual's writing ability. In a study of 202 students enrolled in American Thought and Literature courses at Michigan State University, Culpepper and Ramsdell (1982) indicated that a multiple choice examination was a more effective and informative instrument than an essay test for estimating a student's writing skills. Charney (1984) points out that many teachers and administrators find direct measures of writing ability (qualitative methods) lacking in reliability. However, she states that many of these persons find the indirect measures of writing ability (quantitative methods) lacking in validity. Charney states that qualitative methods allow for the assessment of high level writing skills. As Charney (1984) explains,

"A writing sample may yet be the best, most valid representation of a writer's abilities" (p. 78). And as Greenberg (1987) states:

> Multiple-choice testing--also known as objective or standardized testing--is almost universally abhorred by writing instructors. The capacity to detect errors or to fill in blanks in other people's writing has little to do with the capacity to find and develop an idea in language appropriate for a specific purpose and reader. The alternative that most writing programs use to measure writers' competence or proficiency is a holistically scored writing sample. (p. 38)

In September, 1985 the Commission on Educational Credit and Credentials approved the recommendation to include the essay component in the new GED Writing Skills Test (GEDTS, 1985).

Writing Skills Test Design

The new GED Writing Skills Test introduced in 1988 is Test I of a battery of five tests whose purpose is to be the "basis for the award of a high school equivalency diploma to those [persons] who did not complete a high school program" (Patience & Auchter, 1988, p. 1). The other components of the battery include the tests in Social Studies, Science, Interpreting Literature and the Arts, and Mathematics.

The Writing Skills Test is divided into two sections. Part I is a multiple choice component which covers the content areas of sentence structure, usage, and mechanics. Part II is an essay component which requires the examinees to "write an original composition based on a single expository topic" (GEDTS, 1987a, p. 13). Both parts of the Writing Skills Test are scored separately but

are converted to an overall composite score which is reported to the examinee. The multiple-choice section accounts for approximately 60% to 65% of the total composite score and the essay component accounts for approximately 35% to 40% of the composite score (GEDTS, 1987a).

The Essay Component

Part II of the Writing Skills Test requires the examinee to compose a written essay in response to a prompt. The examinees are directed to write an essay on a single topic. The topic is provided and the examinees are asked to express a viewpoint or present an opinion or explanation about the topic. The topics are brief and they center on general interest items of which adults would be expected to have some knowledge. The forms of the topics utilized and the slight difference in the difficulty of the topics account for some of the variance in percentage that the essay component represents in the overall Writing Skills Test score (GEDTS, 1987a). Of course, the variation in the multiple-choice test form difficulty is also a contributing factor here.

A total time of at least 45 minutes is permitted for composing the essay. The examinees are instructed to write their first draft on scrap paper and to write the final composition in ballpoint pen on the lined paper of the official GED Test answer sheet.

Scoring the Essay

Every essay written for the Writing Skills Test is evaluated by means of The GED Essay Scoring Guide, a six-point holistic scoring scale. In holistic scoring, emphasis is placed on the paper as a whole and not so much on its component parts. The primary concern of the scorers is the overall effectiveness of the paper. The emphasis is not

on a total number of individual errors detected. It should be recognized, however, that a large number of individual errors would certainly have an impact on the overall effectiveness of the essay and its ultimate rating (GEDTS, 1987a).

Each essay is read through quickly by two scorers who assign to it a score from a low of one to a high of six. If the two scores assigned are either the same or within one point of each other, the two scores are added, resulting in a score between 2 and 12. If the scores assigned differ by more than one point, a third reader scores the essay. The three scores then are averaged and then doubled. The raw score of the essay is combined with the raw score of the multiple-choice section and is then converted to a composite score on a 20-80 standard score scale (GEDTS, 1987a).

In the Commonwealth of Virginia, an examinee must score at least a 35 on each of the individual tests and a combined battery score of at least 225 in order to receive the GED credential. The 225 combined score means that the examinee must have an overall average score of 45 for each individual test. If an examinee fails to meet any or all of these requirements, then the examinee must wait 60 days to retake a test or tests.

Scoring of the essay component of the Writing Skills Test for the Commonwealth of Virginia is done by the GED Testing Service in Washington, DC; however, the Virginia Department of Education scores the four other tests in the battery and also the multiple-choice portion of the Writing Skills Test.

Training of Essay Readers

The training of GED essay readers is conducted at a GED
certified scoring site and supervised by a GED Chief Reader.
Applicants who want to become GED essay readers must possess the
following qualifications: (1) a baccalaureate degree, (2) at least two
years experience teaching English-language arts at the secondary,
adult, or post-secondary level, (3) the ability to write effectively,
(4) the willingness to accept established essay scoring standards,
(5) openness to the concepts and principles of holistic scoring, and,
(6) a demonstrated ability to work well in group situations. To become
certified as a GED essay reader, a qualified applicant must attend a
GEDTS-designed holistic scoring training session and must obtain an
acceptable score on a set of reader certification papers provided by
GEDTS (GEDTS, 1987b).

Applicants for certification as a GED Chief Reader must possess
these qualifications: (1) meet all essay reader qualifications, (2) have
demonstrated leadership ability, (3) have strong communication skills,
and (4) have knowledge of holistic scoring procedures preferably by
participation in or leadership of scoring sessions. To obtain
certification as a GED Chief Reader, a qualified candidate must be:
(1) approved by the state or province administrator, (2) trained in
holistic scoring procedures in accordance with GEDTS Chief Reader
guidelines by attending a GEDTS Chief Reader training session,
(3) willing to supervise GED holistic scoring sessions, and (4) certified
as a GED essay reader (GEDTS, 1987b).

The training of the essay readers usually occurs prior to or at the
beginning of the essay scoring session. The chief reader first provides

an introduction to the principles of holistic scoring; then the readers are given the essay topic, the GED Essay Scoring Guide, and the range-finder essays which include at least one paper at each point on the score scale. After discussion of the tasks required by the topic and a review of the scoring guide, the readers read the rangefinders, quickly evaluate them based on an overall impression, and rank them from best to poorest. Readers are instructed to use the entire range of scores for the rangefinders. By a show of hands readers indicate how they scored the rangefinders. If substantial differences exist among the readers at this point about scoring the rangefinders, readers designated as "table leaders" conduct discussions among the readers at their tables to bring each individual to a point of consensus within the group. After the discussion of the rangefinders, more sample papers are scored by the readers. Scoring and discussion of sample papers continues until the entire group of essay readers begins to show a consensus in their scoring. At this point, the training period ends and the actual scoring of essays begins (GEDTS, 1987b).

The goals of an essay scoring session primarily are inter-rater reliability and reading stability. The former is indicated by the degree to which essay readers agree with each other, while the latter is the degree to which essays are scored according to the standards in the GED Essay Scoring Guide. In order to achieve these two goals, reinforcement of scoring standards continues after the training session is over. As readers score papers, usually 30 to 45 minutes at a time before taking breaks, a table leader selects scored papers at random to verify that the scoring is consistent with the scoring guide definitions. This monitoring continues throughout the entire scoring

session. In large essay readings, the chief reader periodically reviews the scoring of the table leaders. This system of checks and re-checks helps assure that all readers are scoring according to the standards defined by the scoring guide (GEDTS, 1987b).

<div align="center">Writing Theory</div>

Background

There is currently a renewed interest and an enhanced focus on the field of writing. Primarily due to the demands for educational reform, a greater understanding of the importance of writing instruction has begun to develop. For many educators, writing instruction has long been regarded as either a subordinate or an additional instructional activity to other instructional activities, most notably reading. More recently however, there has developed a shift in perspective that recognizes the importance of writing instruction, not as an isolated activity, but as an activity that needs to be integrated more with other instructional activities. Writing has gained an enhanced status as a tool for critical thinking and learning. This shift in perspective and this increased status has certainly been aided by the changes in the focus of writing research.

The literature on writing suggests that most writing research can be classified into three separate areas. White (1985) identifies these areas as (1) a focus on text which emphasizes writing as a product, (2) a focus on communication and the interaction between writer and reader which emphasizes writing in a social context, and (3) a focus on cognitive operations which emphasizes writing as a process.

Product Literature

Freedman, Dyson, Flower, and Chafe (1987) indicate that most of the studies on writing prior to the 1970s focused on the written product. This was primarily because researchers had no formulated theory on the development of writing skills. "Researchers . . . compared the effectiveness of a variety of ad hoc instructional methods or concentrated on how best to evaluate the final product" (Freedman et al., 1987, p. 1). Donovan and McClelland (1980) describe this approach to writing instruction as "composition as formalist criticism" (p. x). And Dawe, Watson, and Harrison (1984) explain that this point of view is represented by those individuals who believe that the teaching of writing and the testing of writing ability "involves the laying down of sets of well-established and well-honored principles about all relevant (and perhaps some irrelevant) aspects of grammar, rhetoric, and usage" (p. 5). Hairston (1982) states:

> It is important to note that the traditional paradigm . . . derives partly from the classical rhetorical model that organizes the production of discourse into invention, arrangement, and style, but mostly it seems to be based on some idealized and orderly vision of what literature scholars, whose professional focus is on the written product, seem to imagine is an efficient method of writing. It is a prescriptive and orderly view of the creative act. . . . (p. 78)

Some of the earliest product research on writing language was done by Stormzand and O'Shea (1924) whose focus was on the sentence. They analyzed 10,000 sentences from the writing of elementary, secondary, and university students, adult letter writers,

newspaper writers, and professional authors of fiction and essays. The purpose of their study was to determine what structures helped to distinguish mature writers from less mature ones. They reported that as individuals matured there was a steady growth in their ability to produce more complex sentence structures. As evidence for their report, Stormzand and O'Shea indicated that the use of compound sentence structures declined as individuals got older, but that there was an increase in the use of clauses and phrases.

Further research on sentence structure was conducted by LaBrant (1933). She originated a measurement indicator of writing development which she called the "subordination ratio." The subordination ratio is calculated in a piece of written discourse by dividing the number of subordinate predicates by the total number of predicates used. LaBrant's study contended that steady increases in the subordination ratio followed chronological age more closely than mental age and that dependent clauses increased both in frequency and complexity as writers matured. This study also indicated that there were no significant differences in the rate of subordination used in written discourse by men and women as had been previously advocated by some contemporary linguists.

Hunt (1965) studied the characteristics of the writing of students in grades four, eight, and twelve. He examined close to 1,000 words of writing from each of the 54 students (18 per grade level) in the study. The writing was done in class and was not altered by anyone other than the student and the subject matter was not controlled by the researchers. A major focus of Hunt's was on the "minimal terminal unit" or "T-unit." The T-unit was defined as the

main clause plus any subordinate clauses and modifiers contained within the main clause. Among the results of Hunt's study were that T-unit length is tied closely to writer maturity, as writers mature the T-unit gets longer indicating an ability of the writer to produce more complex sentence structure and that clause length is a better indicator of writing maturity than sentence length.

In a study which examined the written and oral language behavior of students, O'Donnell, Griffin, and Norris (1967) collected language samples from 180 children in grades K-3, 5, and 7 by having them provide both oral and written responses to eight minute, silent-run, animated cartoons of two of Aesop's fables. Each of the children were asked to tell the story to an interviewer, in private, and to answer some pre-planned questions. These oral responses were recorded on tape. Children in grades 3, 5, and 7 were also asked to write the story of the film and to answer the same preplanned questions. The results of the study indicated support for Hunt's findings on the T-unit by showing that as students advanced from grade to grade the average length of the T-unit increased. They also indicated that the T-unit length became longer in writing than in speech as the students advanced in grades.

In his collection of six essays addressing the structure of the sentence and of the paragraph, Christensen (1967) called for a new generative rhetoric in writing. His new rhetoric was based on four principles which he labeled addition (adding modifiers), direction of modification (before and after what they modify), levels of generality (stating main clause in general, abstract, or plural terms), and texture (style is rich or thin). He believes that this generative rhetoric could

and should be taught by emphasizing the works of professional writers like Hemingway. Unlike Hunt, Christensen did not believe that the T-unit was necessarily an accurate measure of writing maturity. He suggested that researchers and linguists should concentrate on sentence modifiers rather than subordination. Furthermore, he advocated teaching what he called the "cumulative sentence." It is a sentence which is dynamic, not static, and which represents the ebb and flow of the mind at work, moving forward, pausing, consolidating, and then moving forward again.

Struck (1965) was also interested in the writing practices of professionals. He contrasted the way graduate students and professional writers begin their sentences. Struck reported that professional (published) writers began sentences with subjects over 50% of the time; also, he indicated that published writers used dependent clauses, 6% of the time; prepositional phrases, 13% of the time; adverbs, 8% of the time; coordinate conjunctions, 12% of the time; and verbals and expletives, 6% of the time.

While the previous studies have as their focus the form of sentence structure, product research has also been conducted on composition quality. Potter (1966) attempted to demonstrate the contrasting characteristics of 100 essays written by 10th-grade students. Six English teachers rated the papers in three categories: good, average, and poor. The best 20 essays and the worst 20 essays were used as the basis of his findings. He concluded, among other findings, that good papers showed greater length of sentences and of T-units, and that poor papers began with less verbal structures,

showed less variety in the use of coordination or subordination, and used less transitional devices.

Veal (1974) examined the connection between syntactic complexity and overall composition quality. A product-scale instrument was designed to yield reliable estimates of the overall quality of writing samples by elementary school students. Writing samples from 81 Georgia second, fourth, and sixth grade children were procured for analysis and rating. The results of Veal's study indicated that composition length (total words) appeared to correlate highly with composition quality. Also, he reported that T-unit length and the increase in the number of subordinate clauses distinguished between levels of quality for some, but not all, grade levels in the study. He suggested that, at the elementary school level anyway, composition quality may be enhanced by the teaching of syntactical options to enhance writing maturity.

In a study by Jurgens and Griffin (1970), 269 quality-rated compositions of seventh, ninth, and eleventh graders were examined in terms of seven linguistic measures: total number of words, total T-units, subordinate clauses, clauses of all types, words per clause, words per T-unit, and clauses per T-unit. The purpose of the study was to test hypotheses about the relationships between students' quality of writing and students' age and levels of maturity. Papers of each grade level were quality-rated as high, middle, or low. The results indicated that not all of the researchers' hypotheses were confirmed. Quality subgroups were distinguished by significant increases in total words, total T-units, and total clauses. Other

hypotheses were not confirmed regarding assumptions of uniform performance patterns in all grades.

Nold and Freeman (1977) conducted a study to help determine what influences the rating a teacher gives to a student composition. Twenty-two Stanford University freshmen wrote four essays each on four different topics, all in the argumentative mode of discourse, over a two hour period. Six experienced teachers, each of whom had at least one year's experience teaching Stanford freshmen, read all of the essays and rated them using a four-point holistic scale which ranged from a high of one (best) to a low of four (worst). Eighteen syntactical features were identified to possibly predict a quality rating for each essay. The 18 syntactical variables were: words per T-unit, subordinate clause per T-unit, mean main clause length, mean subordinate clause length, percentage of prepositions in syntactical sample, percentage of possessive nouns and pronouns in syntactical sample, percentage of adverbs of time in syntactical sample, modals per finite verb in syntactical sample, bes and haves in auxiliaries per finite verb in syntactical sample, passives per finite verb in syntactical sample, progressives per finite verb in syntactical sample, percentage of gerunds, participles and absolutes in syntactical sample, percentage of words in final free modifiers in syntactical sample, percentage of words in medial free modifiers in syntactical sample, common verbs per finite verb in syntactical sample, dummy variable for long essays, and dummy variable for short essays. The variables of dummy variable for short essays, percentage of words in final modifiers, percentage of finite verbs with modals, percentage of verbs with be or have as

auxiliary, and percentage of common verbs emerged from the multiple regression analysis as possible predictors of quality.

Crowhurst (1980) examined the relationship between syntactic complexity as measured by mean T-unit length and quality ratings of two modes of discourse (narration and argument) of pupils in grades 6, 10, and 12. She predicted that: (1) arguments of high syntactic complexity would receive higher quality ratings than arguments of low syntactic complexity written by the same students and (2) narrations of high syntactic complexity would not receive higher quality ratings than narrations of low syntactic complexity written by the same students. Pairs of compositions from over 200 students at each grade level, writing in one or the other mode of discourse, were rated by twelve experienced teachers (four from each grade level), using both a holistic score scale and a "composition quality instrument." The results indicated that the prediction about the relationship between syntactic complexity and quality ratings in the mode of narration was confirmed at all three grade levels. Quality narratives, then, are not necessarily dependent on syntactic complexity. The prediction about the relationship between syntactic complexity and quality ratings in the mode of argument was confirmed at grade levels 10 and 12. Effective argumentative discourse is related to syntactic complexity.

These studies represent research conducted on the product of writing. It is research whose focus is the attempt to measure writing ability, writing maturity, or writing quality by examining various elements perceived to be related to the end product of writing--the final composition. These studies seem to suggest that the key to quality compositions is to build them from their component parts.

These studies further seem to suggest that what is really important is analysis of the product to discover that one component part which is the best predictor of a composition's quality.

Process Literature

As researchers began to concentrate more on how a composition developed, as opposed to the end product of that development, the focus of writing instruction shifted from product to process. White (1985) notes that the focus of process research is "on identifying covert mental operations and their behavioral indicators" (p. 190).

The process approach to writing instruction stresses the cognitive processes in which a writer engages during the act of communication in written form. Even though various researchers have assigned different terminology to the stages of the composing process, most of them agree that it can be separated into the three areas of prewriting or planning, writing, and revising. While early process research indicated that these stages were linear in nature, it is generally accepted now that they are recursive. Writers, then, do not necessarily proceed through the stages in lock-step fashion; indeed, they most often move back and forth and in and out of the stages as the composition develops.

The work of Emig (1971) is often recognized as an initial touchstone for process research in writing and a model for many subsequent studies. Using the case study approach, she studied the composing processes of eight high school seniors of average or above average intelligence. Six of the students were considered to be good writers, while the other two were characterized as not very good writers. During each of the four sessions the students met with the

investigator, they were asked to compose in a different rhetorical mode. While they simultaneously composed aloud and on paper, the students were tape-recorded. During this composing process, they were also observed by the investigator. Later, Emig analyzed the students' compositions, the tapes of the composing process, and the observer's record of the student during the composing process. Emig also conducted interviews with the students about their writing experiences.

Emig's research indicated that these students engaged in two composing modes, reflexive and extensive, and each of the composing modes was characterized by processes of varying lengths with different clusters of components. Reflexive or self-sponsored writing was shown to be a longer process than extensive or school-sponsored writing. Furthermore, in self-sponsored writing, students spent more time in the prewriting stage and they spent more discernible time starting, stopping and reformulating. Emig also indicated that regardless of the mode, able student writers in her study voluntarily did little or no formal planning, such as an outline.

In a study modeled very closely on the work of Emig, Mischel (1974) reported his findings related to his single-subject, case study of a 17-year-old high school senior whom he called "Clarence." The results of this study were generally consistent with those of Emig's. Mischel indicated that as a result of Clarence's school experiences and his own evaluation of the importance of writing, Clarence had negative feelings about writing. However, Clarence could easily write on topics either supplied to him or supplied by him when he drew upon his personal experiences. But, as Mischel indicated, little writing

instruction attempted to connect and relate language to personal growth or experience.

Stallard (1974) conducted a study in which he compared the writing behaviors of 15 Virginia high school seniors acknowledged as "good" writers with the writing behaviors of 15 other randomly chosen Virginia high school seniors from the same class identified as "average" writers. He identified the following behaviors as characteristic of the good writers:

1. They spent more time thinking about the writing assignment.

2. They were concerned about having a purpose for their writing.

3. They spent more time in the pre-writing and writing stages.

4. They were slower writers.

5. They revised more as they wrote.

6. They stopped frequently to read over what they had written.

Pianko (1979) studied the composing processes of 17 freshmen enrolled in a community college. Ten of the students were classified as traditional college writers and seven were classified as remedial college writers. Once per week for five weeks, each of the students completed a writing assignment for the project. Each of the students was observed and video-taped at least once and was interviewed about past and present writing experiences. For the entire group of students, the results indicated the following:

1. The prewriting phase was very brief.

2. Most of the students did their planning mentally.

3. The composing rate was 9.3 words per minute.

4. During the actual composing act, most students paused often and rescanned.

5. Most of the students produced only one draft.

6. Reaffirmed the assumption that school-sponsored writing elicits little commitment from students.

This study further indicated the following significant differences between the traditional writers and the remedial writers:

1. Traditional writers spent more time in the prewriting phase.

2. Traditional writers paused twice as many times when composing.

3. Traditional writers rescanned three times as much as remedial writers.

Perl (1979) examined the composing processes of five unskilled college writers. She met with each of the students for five 90-minute sessions with four of the sessions devoted to having students write and compose aloud simultaneously and in the final session interviewing the students about their writing. The students were taped and an analysis was done on their composing aloud along with an evaluation of their completed compositions and their interviews with the researcher. The results of Perl's study indicated that:

1. All of the students displayed consistent composing processes.

2. The students spent, on the average, 5-1/2 minutes in the prewriting stage.

3. Planning strategies fell into one of three types:

a Rephrasing the topic until a particular word or idea connected with the student's experience,

b. Turning the large conceptual issue in the topic into two manageable sub-topics, and

c. Initiating a string of associations to a word in the topic and then developing the associations during composing.

4. The students' writing process moved back and forth among the different stages of writing; it was recursive.

5. Editing was instrumental in the composing processes.

6. The students engaged in a great deal of paper re-reading.

7. The writing point of view of these students was egocentric.

Flower and Hayes (1980) studied expert and novice writers to determine how they attempt to define for themselves a rhetorical problem. For these researchers, writing is a problem-solving, cognitive process. In this study, they were concerned with "the act of finding or defining the problem to be solved" (p. 22). They analyzed taped recordings (protocols) of the writers which had been made as they simultaneously composed aloud and on paper. Flower and Hayes reported that differences between expert and novice writers included the following:

1. Good writers address all aspects of the writing problem, while poor writers are more concerned with the features and conventions of a composition such as number of pages or format.

2. Good writers create a rich network of goals to help them generate ideas while poor writers are mostly concerned about generating supporting statements for the topic.

3. Good writers are dynamic in their approach to the writing task, whereas poor writers are more static.

In a study designed to examine why writers pause during composing and to discover what happens during these pauses, Flower and Hayes (1981) studied the think-aloud protocols of three expert and one novice writer. The researchers attempted to discover what these writers actually thought about during their pauses by examining the location and length of long (pregnant) pauses. They determined that writers engage in a process of sustained concentration or focus in which the writers' thinking gives shape to the product of composition. Flower and Hayes call these periods of thought "composing episodes" and believe that the space or boundary between these episodes is the source of the long "pregnant" pause. The results of this study indicated that many of a writer's goals and goal-related activities occur during the pauses before the composing episodes. They also indicated that paragraphs were not a good predictor of episode boundaries (pauses) but that paragraph occurrence, although related to pauses, does not account completely for either the existence or logic of episodes.

Pauses during the writing process were also the subject of a study by Matsuhashi (1981). Four high school students (three seniors and one junior) considered to be skilled writers initiated 32 compositions during eight videotaped and timed sessions. During every session, each of the students wrote compositions in each of four discourse modes: expression, reportage, generalization, and persuasion. The students were recorded by means of two cameras-- one focused on the student and the other focused on the student's writing pad. Even though each student composed in four discourse modes, Matsuhashi only reported the results of three: reportage,

generalization, and persuasion. Among other findings, Matsuhashi reported that the type of discourse significantly affected the length of a writer's pauses. Writers paused longer as they attempted to write in the modes of reportage, persuasion, and generalization, respectively.

Another aspect of the writing process which has received attention is revision. Tired of the belief that revision was the final stage of a linear concept of the writing process, Sommers (1980) undertook a series of studies over a three year period to examine the "process" of revision as applied to the composing of "student" and "experienced" writers. Student writers were 20 freshmen at Boston University and the University of Oklahoma while experienced writers were 20 adult writers (mostly journalists, editors, and academics) from Boston or Oklahoma City. Each writer wrote and then twice rewrote three essays each in the modes of expression, explanation, and persuasion. After the final revision of each of the three essays, each writer was interviewed and was asked to suggest revisions for a composition by an anonymous author. All of the essays were analyzed by counting and categorizing changes made in the four revision operations of deletion, substitution, addition, and reordering and for the four levels of change identified as word, phrase, sentence, and theme. The results of the study indicated that the revision strategies of student writers had the following characteristics:

1. They viewed revision as a rewording activity.

2. The extent to which they revise is a function of the ease or difficulty of writing their composition.

3. They did not use the revision operations of addition or reordering.

The revision strategies of experienced writers had these characteristics:

1. They viewed revision as finding the framework, pattern, design, or shape of their argument.

2. They have a sense of audience which is not egocentric.

3. Most revision occurs at the sentence level.

4. They have a non-linear concept of revision; it is holistic.

5. They view revision as a recursive process.

Bridwell (1980) analyzed for revision the papers of 100 randomly selected high school seniors whose writing task included composing in the three modes of explanation, expression, and persuasion. During the first writing session, the students wrote an essay on a pre-administered topic and made some revisions. Teachers then collected the compositions. On the following day, the compositions were returned; students were asked to make any further revisions if they so desired and to compose a second revised composition. Different color pens were used by the students each day, so that the researcher could differentiate what revisions occurred during which session.

Each of the students' two compositions was analyzed for revisions at the surface level, word level, phrase level, clause level, sentence level, and multiple-sentence level. The results showed that all of the students did some revising and that surface and word level revisions accounted for over half of the revisions made. Of 6,129 revisions made by the writers, the greatest number occurred during the composition of the second draft and most of the revision was done at the word level. While most students did no revising at the clause

level, most sentence-level changes were interlinear or marginal additions or subtractions during the composing of the first draft and sentence substitution during the composing of the second draft. Using an analytical quality rating scale, raters determined that the second draft was superior to the first draft, thus reinforcing the importance of revision.

Faigley and Witte (1981), in a study designed very similarly to that of Bridwell's, examined examples of revisions from six inexperienced student writers, six advanced student writers, and six expert adult writers. The results of the study indicated the following:

1. The expert writers were not the most frequent revisers.

2. The advanced students revised most frequently.

3. Inexperienced writers' revisions were mostly surface changes.

4. Advanced students' and expert writers' revisions were fairly evenly distributed between surface and meaning changes.

5. Advanced students and expert writers made more revisions during the first draft than did inexperienced students.

6. Of all kinds of revisions, most occurred between drafts one and two.

7. Expert writers revise in different ways from inexperienced writers by sometimes using an almost stream-of-consciousness approach, a single long insert, or just "pruning" the text.

In a study directed at examining and classifying the errors of very inexperienced writers, Shaughnessy (1977) analyzed over 4,000 college placement essays of these writers over a five year period. These students were incoming college freshmen who were, for the

most part, natives of New York City, had earned a high school diploma, and under an admission policy adopted by the City University of New York (CUNY) were guaranteed a place in one of its 18 tuition-free colleges. The essays of this very inexperienced group were shockingly poor. In her research to discover what the writing problems of these students were, based on an analysis of their writing errors, Shaughnessy reasoned that for these students, given the assumption that they had come through schools that utilized standard texts and standard methodologies for teaching writing, this standard approach did not work.

Shaughnessy called the writing of these inexperienced writers basic writing (BW). She argued that the reason which underlies the poor writing is not that these students are "slow or non-verbal, indifferent to or incapable of academic excellence, but because they are beginners and must, like all beginners, learn by making mistakes" (p. 5). In her work, she attempted to: (1) give examples of the range of problems that occur under each of her designated categories of difficulty, (2) reason about the causes of the difficulties, and (3) suggest ways a teacher might approach solving the problems. As Hairston (1982) explains,

> Shaughnessy's insight is utterly simple and vitally important: we cannot teach students to write by looking only at what they have written. We must also understand how that product came into being, and why it assumed the form it did. We have to do the hard thing, examine the intangible process, rather than the easy thing, evaluate the tangible product. (p. 84)

Shaughnessy's work greatly helped generate interest and research in the process approach.

Social context literature. The social context perspective on writing is not a distinct and separate perspective from both the product and process approaches. While it cannot be considered a product approach, it can be viewed as a perspective within the process approach. In the social context perspective, the focus is on communication, within a social setting. As White (1985) explains, "From this view, writing serves one or more functions that make sense in a particular setting" (p. 181). Writing, then, is an interactive process which is dependent on the effective and successful communication of meaning to the reader. The concept of reader as audience becomes very important in this perspective, as does the purpose for writing.

In his theory of discourse, Moffett (1968; 1981) identifies four stages through which a human experience may be processed. These stages are based upon a progressive increase in distance between a speaker and the audience and between a speaker and the subject. According to Moffett, in terms of the speaker-audience relationship, once an event is experienced it may go through both spoken and written processes which gradually make the speaker's audience more and more distant from the speaker. These stages are identified by Moffett as inner verbalization (thinking to oneself), outer vocalization (speaking to another person face to face), informal writing or correspondence (writing to a known party), and formal writing or publication (writing to a mass, anonymous audience). Simultaneously, the event itself (the subject) moves from concrete experience to

abstract idea, as it moves through these progressions. In terms of the speaker-subject relationship, at stage one the event is recorded, at stage two it is reported, at stage three it is generalized, and at stage four it is inferred what will, may, or could be true of the event.

Moffett's theory of discourse is rooted in the work of cognitive psychologists such as Piaget, Bruner, and to some extent, Vygotsky. Moffett's theory is grounded in the beliefs, as espoused by these individuals, that human growth and development is continuous throughout the lifespan and that it is characterized by a movement from the concrete to the abstract and from egocentrism in thought, speech, and deed to a more socialized, decentered, public orientation.

Moffett developed a writing program undergirded by his theory of discourse whose emphasis is on "the evolution of one kind of discourse into another, on progressions of assignments that allow language experiences to build on and reinforce each other in significant ways" (Moffett, 1981, p. 5). His program requires the student to use personal experiences as subjects of writing assignments. Grammar, punctuation, logic, semantics, style, rhetoric, and esthetic form are taught as part of the process through writing and writing discussions, not as separate things to be learned in full before the writing act. Comprehension of drama, narrative, poetry, and essay are learned through a conjunction of reading and writing. Writing is taught as a recursive process in which the student goes through and returns to the different writing phases (stages) as compositions are written. In his view, writing is both a personal and social process to effect communication (at varying levels) within the environment.

In his model of language, Britton (1982) focuses on the relationship of the function of language with the roles in which individuals find themselves when using language. He defines these two functions of language as participant and spectator. As Britton views it, when individuals speak or write to get things done or to make things happen, they use language in their role as participant. That is to say, the individual participates in an event while it is happening; the individual is participating in an event within a specific context at a specific time. Britton labels writing done within this context as "transactional." When individuals use language to reconstruct events that are not now happening, to reflect on events, then individuals use language in their role as spectator. Writing within this context Britton calls "poetic." He calls the context of transactional writing "piecemeal contextualization" and the context of poetic writing he calls "global contextualization."

Along the writing continuum, with transactional writing at one end and poetic writing at the other end, Britton places "expressive" writing in the center. This function of writing is "equally at home in either the spectator role or the participant role" (Britton, 1982, p. 106). Expressive writing is very personal to the writer, relaxed, loosely structured, and only really communication when the audience is in the same context as the writer.

Like Moffett, Britton's theory of discourse is concerned with the distance between the writer and the audience. In Britton's view, as writing moves from the transactional to the poetic, the audience gets more distant and the individual's role changes over time and space, and, thus, so does the function of the language.

Britton believes that writing can and should be an act of discovery. Furthermore, he believes that the best way to learn to write is by writing and that writing should be strongly related to an individual's personal experiences.

Another theory of discourse is advanced by Kinneavy (1971). The foundation for his theory of discourse is the communication triangle which includes an encoder (person who sends the message), a decoder (person who receives the message), and the reality to which the message refers. Important to this communication triangle is the signal, the language which carries the message. Kinneavy notes that the components of the communication triangle have often been identified in various disciplines by other terminology. For Kinneavy, discourse is defined as "the full text of an oral or written situation" (p. 4). Furthermore, discourse is characterized by individuals acting in a particular place and a particular time; by having a beginning, middle, closure, and purpose; by being a language process; and by establishing a verbal, situational, and cultural context.

Kinneavy's definition of discourse as stressing the whole text (range of component elements) led him to classify discourse into four types, based on the aim, purpose, use, or function of the type. Referential discourse emphasizes reality; its purpose is to understand or inform. Referential discourse can be subdivided into exploratory, scientific, and informative. Examples of referential discourse include dialogues, inductive and deductive reasoning, news articles, reports, summaries, and textbooks. A second type of discourse is expressive; here the emphasis is on the encoder, the message sender. Expressive discourse can be individual or social in nature. Examples of expressive

discourse are diaries, journals, contracts, plans, or religious creeds. A third type of discourse is persuasive; the emphasis here is on the decoder, the message receiver. Persuasive discourse attempts to "move" the decoder in some way, physically or psychologically. Examples here include advertising, political speeches, and editorials. A final type of discourse is literary; the emphasis is on the language (signal). Examples of literary discourse include short stories, short narratives, poetry, and ballads or folk songs.

Kinneavy believes that no individual type of discourse is better than any other because, in truth, these types of discourse often overlap according to the emphasis of the discourse type.

Kazemak (1984) maintains that expressive discourse, in this instance expressive writing, as delineated in Kinneavy's theory of discourse, should be the basis for all writing in adult literacy instruction. She states, "Although there are some exceptions . . . the emphasis in most adult literacy programs is on 'functional' or 'survival' writing skills, such as filling out forms, completing applications, writing business letters, and so on" (p. 201).

In a study designed to examine author decentrism in two modes of discourse (writing and speaking), Kroll (1978) tested the effect of the mode of discourse on the adequacy of 44 fourth-grade students to communicate information. The children were assigned to one of two groups. There was an equal number of students in each group and the same number of males and females across each group. Each student in both groups learned to play a board game adapted by the researcher. Students then produced an explanation of how to play the game. One group produced a written explanation and the other group spoke their

explanation. Two weeks later the groups returned, were refamiliarized with the game, and then again produced game explanations. This time the groups produced their explanations in the mode of discourse which they had not initially used. Scores assigned to the explanations indicated that the students had a more difficult time communicating their explanations in writing than in speaking. In terms of author decentering (moving away from egocentrism), writing lagged behind speaking.

Staton, Shuy, and Kreeft (1982) analyzed the dialogue journals of 26 sixth-grade students to explore the "developmental link" between students' natural competence in spoken discourse and their developing competence in written discourse. Student-teacher dialogue journals are unique, because they virtually combine spoken and written discourse into "written conversation." Carried out over the length of the school year, topics for the writing were determined by the interests of the students and of the teacher. The topics ranged from academic work to a wide arena of personal concerns. The writing was characterized as interactive, continuous, and cumulative. Language uses not commonly offered to students are freely expressed. The functions of language include students and teachers asking questions, reporting personal experiences, making promises, making evaluations, making offers, making apologies, giving directions, making complaints, and giving opinions.

In reacting to the journal entries of the students, the teacher, as a fully interested participant, asks questions to get more detail, explores concerns, and discusses events with the students. As a by-product of this interaction, the teacher models complexities of

language use, correct spelling, punctuation, and syntax, all within the context of the students' topics. In essence, the written conversation between student and teacher becomes a genuine act of communication through writing.

As indicated by these studies, the process approach to writing, which includes the social context perspective, is a definite break from the more traditional approach which emphasizes the written product. The process approach focuses on aspects of writing found in the recursive three stages of the writing process: prewriting or planning, writing, and revising. Emphasis is on the cognitive processes in which a writer engages as a composition takes shape. From the social context perspective, in addition to the emphasis on cognitive processes, there is an enhanced focus on writing as a means of communication and an audience awareness.

Holistic Evaluation of Writing

During the past 20 years, as more writing research has focused on the process approach, there has been a parallel development in the holistic evaluation of writing. White (1985) views this development as opposition to "analytic reductionism" (p. 18). Holistic evaluation is seeing that, in essence, the whole is not necessarily just the sum of its constituent parts. The holistic evaluation of writing emphasizes the entire piece of writing and not just the counting of individual errors.

The holistic evaluation of writing is a method of rank-ordering compositions using a holistic scoring guide. As Cooper (1977) explains, the composition may be graded or scored by a rater impressionistically in one of three ways: (1) the composition may be matched with another composition in a series of compositions; (2) the

composition may be scored for the presence of particular features important to that particular type of writing; or, (3) the composition may be assigned a letter or number grade that is included on the scoring guide scale.

Cooper (1977) identifies seven types of holistic evaluation of writing: (1) Essay Scale: A scale in which complete compositions are arranged by quality along a continuum from excellent to poor. The rater attempts to match a new composition with a piece along the scale most like it; (2) Analytic Scale: A scale which lists the particular features of a composition in a specified mode. Each feature is described in detail with high-mid-low points identified and described along a scoring line for each feature; (3) Dichotomous Scale: A scale which is composed of a list of statements about features which a composition does or does not contain. The rater simply answers yes or no to each feature identified for each piece of writing; (4) Feature Analysis: An instrument which focuses, not on a variety of features contained in a composition, but one which focuses on one particular feature in a piece of writing; (5) Primary Trait Scoring: A guide for scoring which focuses the attention of the rater on the prominent features of a particular kind of discourse. The scoring guides for Primary Trait Scoring are "constructed for a particular writing task set in a full rhetorical context" (p. 11); (6) General Impression Marking: A range of papers is produced for an assignment and the rater fits the essay to be marked within that range of papers; and (7) Center of Gravity Response: A response and feedback instrument developed by Peter Elbow. It is not a scoring method but a method based on

identifying main points and summarizing a composition to respond to the writing and to give feedback to the writer.

As a method of evaluating writing ability, the holistic approach, as noted earlier, has both its proponents and its opponents. Those who are reluctant to believe that it is an acceptable methodology most often cite two major reasons. First, they believe that it is too expensive, and second they believe that it is too unreliable. Those who believe that holistic evaluation of writing is an acceptable methodology cite its high validity and stress that it is no more expensive than developing standardized tests, and that good rates of reliability can be obtained.

Godshalk, Swineford, and Coffman (1966) in a study of 646 11th and 12th grade students' writing, reported that a reading reliability of approximately .92 and a score reliability of approximately .84 can be attained if five separate topics can be utilized and if each topic can be read by five different readers. However, for a single topic read by one reader, the reliabilities drop to .40 and .25 respectively. Increases can be achieved by adding topics and/or readers. Furthermore, they reported that the best predictor of a reliable direct measure of writing ability includes both essay and objective questions.

White (1985), although an advocate of holistic scoring, warns of its limitations. He describes it as a methodology only for the rank-ordering of students' essays and, as such, only has meaning when applied to the group being tested and in reference to the scoring guide criteria. The measurement of writing ability obtained from the use of holistic scoring is not an absolute value, but only an indicator of an individual's writing ability for that topic, on that test day, as

measured by the criteria set forth in the scoring guide. As such, "it gives no meaningful diagnostic information beyond the comparative ranking it represents" (White, 1985, p. 28). However, he contends that even with its acknowledged limitations, it is still the best method of scoring large quantities of writing. Furthermore, he speaks directly to the reliability issue and maintains that even though reliability is a legitimate issue with holistic evaluation, it is a real issue with all testing and that even multiple-choice testing, which is acknowledged to have high scoring reliability, still reports a wide range of possible error.

In addressing the unreliability of holistic essay scores, Cooper (1977) cites several studies that support his position that if raters of essays are from similar backgrounds and are trained with a holistic scoring guide, then reliability can be improved to an acceptable level.

On an issue which is not concerned with reliability, but is focused on student learning, White (1982) indicates that from his work with students in his classroom, he believes that using the principles of holistic scoring leads them to a better understanding of what is expected in an essay, how to recognize the differences between stronger and weaker papers, and improvement in their writing. He notes that the mechanical aspects of the students' papers are not much improved, but there is improvement in the areas of organization, development, detail, and fluency.

Swartz and Whitney (1985) explain that there are several reasons for choosing holistic scoring as the best method of scoring the written essays of a nationally-representative sample of high school students. Patience and Auchter (1988) state that these same reasons

were selected by the GED Testing Service for scoring the essay component of the Writing Skills Test. These reasons include: (1) holistic scoring is a quick and relatively simple procedure and is efficient for scoring large numbers of papers; (2) holistic scoring is viewed as a method which can obtain a high degree of inter-reader reliability; and (3) the limitation of offering only one topic "suggested the use of holistic scoring and the combination of a holistic essay score with multiple choice scores to yield a composite writing score" (Swartz & Whitney, 1985, p. 7).

Adult Learning Theory

The Adult Learner

In the modern era, American society, and much of the world community, is quickly transforming from a technological orientation to an informational one. This process of transformation has put a great deal of pressure on adults to keep pace educationally with the increased workplace demands for learning and maintaining new skills. If it is difficult for individuals who have been successful in educational programs previously to stay current with the increased demands, it is even more difficult for adults who have not yet attained a high school diploma. For them, the task is even more formidable. Yet, many adults have returned to educational programs in an attempt to keep themselves, or make themselves, employable. Patience and Auchter (1988) indicate that nearly "three-quarters of a million examinees are tested annually" in the GED program and "almost half a million people earn a GED credential each year" (p. 1). According to information from the Virginia Department of Education, Office of Adult Education, 14,665 Virginia adults were administered the GED tests in English

during fiscal year, 1989-1990. Of these, 12,227 were first time test-takers.

While many adults have enrolled in GED and other adult education programs, much has been written about who these learners are, how they differ from "traditional" students, what appropriate curricula should include, and how they should be perceived and instructed.

Knowles (1970) is most often credited with popularizing the concept of andragogy which he describes as the "art and science of helping adults learn." Initially, he conceived andragogy as a contrasting theory to pedagogy, which he defined as the "art and science of teaching children." However, he later came to view the two theories as ends of a spectrum (Knowles, 1980). He initially based his concept of andragogy on four assumptions that differentiated adult learning from children's learning: (1) the self-concept of the adult moves from one of being dependent toward one of being self-directed; (2) as the adult matures, a reservoir of experience grows which becomes a rich resource for learning; (3) the readiness to learn of adults becomes increasingly oriented to the developmental tasks of their social roles; and (4) learning becomes important for immediate application to problems rather than postponed application (Knowles, 1980). As he later revised his andragogical theory, he added two assumptions to his original four: (1) adult learners have a need to know why they need to learn something before understanding to learn it; and (2) the most potential motivators of adults are intrinsic ones such as self-esteem, job satisfaction, and quality of life rather than

extrinsic ones such as higher salaries, better jobs, and promotions (Knowles, 1984).

Smith (1982) identifies six optimum conditions under which adult learning can best take place:

1. They feel the need to learn and have input into what, why and how they will learn.

2. Learning's content and processes bear a perceived and meaningful relationship to past experience and experience is effectively utilized as a resource for learning.

3. What is to be learned relates optimally to the individual's developmental changes and life tasks.

4. The amount of autonomy exercised by the learner is congruent with that required by the mode or method utilized.

5. They learn in a climate that minimizes anxiety and encourages freedom to experiment.

6. The adults' learning styles are taken into account (pp. 47-49).

Molek (1987) has indicated that there are some characteristics that are common to adult students in learning situations:

1. They may exhibit a lack of self confidence due to previous negative experiences with school, work, or their social life. This lack of self confidence may be fueled by the fact that they have not used school skills for years.

2. They may show a genuine fear of school or the formal educational setting.

3. Their values, attitudes, and goals may differ from middle class norms because they want to be able to apply their learning immediately to solve a problem in their lives.

4.   They may be unusually sensitive to the nonverbal communication associated with facial expressions and body language if they have limited verbal communication skills.

5.   They may well exhibit a use of defense mechanisms or "coping skills" to help cover their lack of some educational skills.

6.   They may be slower to change habits than younger learners since they have had more time to acquire them.

7.   They may be hesitant to express themselves initially, especially if they feel sensitive to ridicule or embarrassment.

8.   They expect to be treated as adults and not as children.

9.   They will have a variety of experiences upon which to draw.

10.   They may have specific goals they want to achieve and may become impatient with learning which they perceive doesn't help them progress toward those goals.

11.   Most of the adult learners are in class because they want to be there.

12.   Many of the adult learners face obstacles to remaining in class such as economic poverty, cultural deprivation, or a multitude of daily home and/or job responsibilities.

Like Knowles, numerous adult educators believe that it is important to understand that roles and stages of development of adults are important to the process of adult learning. The literature on adult developmental stages shows a general agreement among adult educators and researchers that the stages, roles, and tasks are somewhat standard. However, Moore (1988) explains that these stages are general, but not all adults go through these stages at the same rate or time in their lives, and some adults never go through

some of the stages. Nevertheless, she affirms that roles and stage development of adults, like children, affect instructional methods, programs, goals, and needs.

Numerous individual theories of adult stage development have their basis in work done in this area by Erikson (1950). He conceived growth through the life span as a process of meeting and achieving a series of eight psychosocial tasks:

Developmental Issues	Approximate Modal Age
1. Basic Trust vs. Mistrust	Infancy
2. Autonomy vs. Shame Doubt	Early Childhood
3. Initiative vs. Guilt	Prepuberty
4. Industry vs. Inferiority	Puberty
5. Identity vs. Role Confusion	Adolescence
6. Intimacy vs. Isolation	Early Adulthood
7. Generativity vs. Stagnation	Middle Adulthood
8. Integrity vs. Despair	Later Adulthood

Another of the important stage theorists is Havighurst (1953). He was instrumental in developing the concept of the developmental task. Basically, it is a task which arises at a certain point in a person's life and it must be overcome before that person moves on to another stage of development. As Knowles (1980) observes, "Each of these developmental tasks produces a 'readiness to learn' which at its peak presents a 'teachable moment'" (p. 51). Havighurst's (1961) changes in developmental tasks during adulthood can be summarized as follows:

1. Early Adulthood

    a Selecting a mate and adjusting to marriage

    b. Establishing a family and rearing children

    c. Managing a home

    d. Launching an occupation

    e. Beginning civic responsibility

2. Middle Age

    a Establishing and maintaining an economic standard of living

    b. Launching teenage children

    c. Maturing relationship with spouse

    d. Developing leisure activities

    e. Adjusting to physiological change

    f. Adjusting to aging parents

3. Later Maturity

    a Adjusting to declining health

    b. Adjusting to retirement and decreased income

    c. Adjusting to changes in social roles

    d. Establishing satisfactory physical living arrangements

    e. Adjusting to death of spouse

Like Erikson and Havighurst, Kidd (1973) believes that a great deal of adult learning centers on the many developmental tasks of an adult. He believes that learning is change and that "much of learning is related to shifts in the tasks or roles that a person performs" (p. 16).

In addition to role and stage development, adult learning style is also considered important in adult learning theory. As Even (1987) explains,

Each person learns in a different way because each person has
personal life experiences, neurological brain responses, style
preferences, personality dimensions, resultant interests,
predispositions to selected topics and approaches to work, to
life, and to processes which generate individual interest and
need. Learning is very personal and private because each person
responds to and makes sense of new information,
communication input, and ideas in a different way because of
that which has developed within each person over time. (p. 22)

The teaching style of the adult educator is also believed to have
importance for adult learners. Conti (1985) examined the relationship
between teaching style used in the adult education setting and student
achievement. He administered his 44-item Principles of Adult
Learning Scale (PALS) instrument to 29 adult educators in the
Hidalgo-Starr Adult Basic Education Cooperative in Texas. Of the 29
teachers, seven taught Adult Basic Education, eight taught GED
preparation, and 14 taught English as a Second Language (ESL).
Additionally, each of the teachers was part-time, worked in self-
contained classrooms, had been employed by the program during the
previous year, and had complete student records. The teacher's score
on the PALS is an indicator of the degree to which the teachers
support the collaborative teaching mode (learner-centered and
cooperative in nature) advocated by most of the adult education
literature. The results of Conti's study indicated that these teachers
favored a teacher-centered approach and that there was a significant
relationship between teacher style and student achievement. Within
the GED classes, students working in a teacher-centered environment

achieved the greatest gains, while in the ABE and ESL classes, students working in a collaborative environment achieved the greatest gains.

The Adult Writer

There is a growing body of research on the adult writer. Most of the research, however, focuses on adult learners (however they may be defined) in situations other than the GED classroom. This may be due, to a great extent, to the lack of emphasis on writing of the previous GED Tests' design. With the new Writing Skills Test format, an increase in GED writing research might well be anticipated.

Connors (1982) examined the attitudes toward writing and toward methods of teaching writing of non-traditional age and traditional age college students. Non-traditional age students were identified as those from 25-50 years of age and traditional age students were from 18-24 years of age. The results of Connor's attitude questionnaire indicated that most of the students, regardless of age, wanted some direction, limitation, or supervision over their writing. Furthermore, she concluded that non-traditional students:

1. Were very similar to traditional students in their attitudes toward writing and toward the teaching of composition,

2. Were more likely to spend a greater amount of time outside class revising essays and preparing for class, and

3. Were more likely to show greater desire for guidance, limitation, and direction over their writing assignments.

Kalister (1981) reported on her observation of adult learners in a writing center. She reported on adult writers in an individualized, four-contact hour, non-credit, open-entry, open-exit, self-paced

developmental English class that met at night twice a week. Kalister found that these students enjoyed a hands-on approach to learning which included looking through and using handbooks, readers, and research manuals. Also, these non-traditional students were frequently too ambitious and attempted more than they could reasonably handle. Finally, she explains that these adults sometimes enjoyed audio-tutorial and slide series materials, if they were focused on presenting material to the learner as an adult, and did not insult the learner.

In her study of 254 top and mid-level managers, Aldridge (1982) attempted to discover what factors interfere with adults' effective writing. She reported that many of these managers used excessive verbiage in their compositions which resulted often in clumsy style, pompousness, and redundancy. Aldridge also indicated that these managers quite often showed no planning of their writing tasks and showed no ability to organize the content. Furthermore, she suggests that these managers may well be masking a fear of writing stemming from their inability to write well. Aldridge also suggests that these managers may not be aware that they should plan their writing, or if they are aware of it, they may not know how.

Meyers (1983) analyzed the writing samples of 100 adult students and then supplied them with a diagnostic summary of their performance in the five areas of punctuation, grammar and diction, sentence structure, organization, and development. To score the samples, readers used a 22-item analytical scoring process. Scores on the samples could be between 0 and 92. The average score was 51.6 and the range of scores was 35 to 67. The results of the analysis

indicated that these adult students "have more control of the mechanics of writing than of organization and development of ideas" (p. 3). She suggests the possibility of introducing a self-instructional format to help adult students work on their "surface editing skills," while teachers spend more time working with them on areas of writing (line organization and idea development) where they are deficient.

Silver (1982) surveyed 78 representative employers of graduates of Delaware Technical and Community College "to determine the written and oral skills needed for success on the job" (p. 36). These employers were asked to rank 26 specific oral and written communication tasks. In the area of writing, they identified skills such as completing and composing forms, memos, letters, and short reports as very important to job success. They also emphasized the importance of communication skills as vital to job advancement and financial gain. The affirmation of the importance of functional writing by these employers was crucial in the restructuring of the English courses at the school. More realistic contexts for writing were introduced. Students now see writing assignments as more related to their needs. The results of the program have indicated an improvement in writing competency and in motivation for writing.

Enger and Howerton (1988) reported the results of two nationwide administrations of the new GED Tests (1988 edition). The first one was a norming study based on 34,548 GED Tests taken by graduating high school seniors. The second one was based on 55,154 GED Test item sets administered to adult GED examinees who had just completed a GED Test for diploma equivalency. Performance of

GED examinees was divided into those who passed and those who failed the corresponding GED Test. Results indicated that generally the GED Pass group performed similarly to the graduating high school seniors on all GED Tests. Both of these groups significantly outperformed the GED Fail group on each of the five multiple choice tests. For the essay portion of the Writing Skills Test, the results were similar for both groups with no noted significant differences. The results of this study uphold the use of the current GED Test edition to award a high school equivalency diploma.

Fadale and Finger (1988) examined what impact the addition of the writing sample would have on GED performance or passing rate in New York State. The writing sample became a mandatory component of the New York State GED test on July 1, 1986. Their study, conducted in two phases, involved collecting data on a sample of 2,000 first-time test-takers in each phase. The overall results of the study showed that the addition of the writing sample had no detrimental impact. Among the reported results were that first-time test-takers achieved a higher passing rate on the writing subtest subsequent to the addition of the writing sample and learners involved in a local program attained a higher rate of positive change than did non-program adults.

Adult Writing Instruction

As GED training programs attempt to meet the instructional challenge precipitated by the addition of the essay component, many adult educators are calling for a close scrutiny and evaluation of present writing curricula. As Padak and Padak (1988) observe, "In many cases, the change in the GED writing assessment may

necessitate changes in existing practices" (p. 7). Dauzat and Dauzat (1987) stress that adult educators need to "gear-up for implied changes in curriculum and instructional practices" (p. 27) so that quality adult education programs might be maintained and enhanced. And Taylor (1987) explains that preparing students for the essay component will be a "shock" to most GED teachers, because they are not adequately trained to teach writing.

Although she was not directly addressing writing instruction in the GED classroom, Hairston (1982) made an analogy between the "paradigm shift" concept of Thomas Kuhn as he applied it to revolutions in the field of science and dramatic changes she saw taking place in the field of writing. Much of what Hairston described as the "new paradigm for teaching writing" (p. 86) is currently perceived as the appropriate base for teaching writing to adults. She outlined her new paradigm as follows:

1. It focuses on the writing process; instructors intervene in students' writing during the process.

2. It teaches strategies for invention and discovery; instructors help students to generate content and discover purpose.

3. It is rhetorically based; audience, purpose, and occasion figure prominently in the assignment of writing tasks.

4. Instructors evaluate the written product by how well it fulfills the writer's intention and meets the audience's needs.

5. It views writing as a recursive rather than a linear process; pre-writing, writing, and revision are activities that overlap and intertwine.

6. It is holistic, viewing writing as an activity that involves the intuitive and non-rational as well as the rational faculties.

7. It emphasizes that writing is a way of learning and developing as well as a communication skill.

8. It includes a variety of writing modes, expressive as well as expository.

9. It is information by other disciplines, especially cognitive psychology and linguistics.

10. It views writing as a disciplined creative activity that can be analyzed and described; its practitioners believe that writing can be taught.

11. It is based on linguistic research and research into the composing process.

12. It stresses the principle that writing teachers should be people who write. (p. 86)

To help prepare adult learners for the essay portion of GED Writing Skills Test, numerous instructional programs, handbooks, workbooks, and packages have been developed by public school adult education departments, university adult eduction researchers, and state Departments of Education.

Sommer (1989) emphasizes that there is often a great deal of labor and pain involved for those persons who either write or teach writing. Also, he adds that for many nontraditional students, writing can be much more a means of "exposure rather than revelation, a trial rather than a challenge" (p. 11). As such, he explains, it may take a great effort from adult instructors to develop and produce meaningful course plans, assignments, and evaluation methods in the subject of

writing which "has almost no absolutes" in the area of adult education "in which landmarks sometimes shift and there is much that is uncharted" (p. 206).

He offers 15 strategies which can be adapted by each adult education writing instructor depending on the purpose of the adult writing class. These strategies are as follows:

1. Planning the adult writing course should begin with the planner(s) knowing who the adult learners are rather than what they need to learn.

2. The adult learners need to be self-determining and to feel that they have some control over their learning.

3. Writing instruction should involve writing process methods.

4. Instructors should emphasize the various learning processes of adults and the learners should consider how they best learn.

5. Peer collaboration should be used to get the learners to respond to the writing of other people.

6. Instructors should adjust their course content by gaining information about student writing experiences through interviews, surveys, and assessment of their writing samples.

7. Instructors should set clear and attainable objectives for each stage of instruction.

8. The writing course should find applications in the learners' personal, social and work situations for the writing that they do.

9. Experiences of the students should be incorporated into the writing instruction.

10. Have students do a great amount of writing that is not graded or scored to familiarize them with the act of writing.

11. Use qualitative methods of evaluation such as holistic or naturalistic (participatory) approaches.

12. Include students in evaluating their own and others' writing.

13. Individual conferences with students should be utilized to discuss with them their progress.

14. The instructor should continuously question and reflect upon his own teaching methods.

15. Structure the teaching to the learning, and not the reverse.

Sommer's strategies reflect much of the current thinking about teaching writing to adults. They also are representative of numerous approaches to teaching writing skills for the essay component of the GED Writing Skills Test. Since the announcement by the GEDTS in 1985 that an essay component would be included as apart of the Writing Skills Test beginning in 1988, there has been an increase in the development and production of resources for teachers and students focussing on writing programs and curricula for this new essay component.

The Lincoln Intermediate Unit No. 12 (1987) has developed the "Write-Now" manual for GED instructors. In it, they outline what they believe about the teaching of writing in ABE/GED programs. Among their beliefs are the following:

1. A basic responsibility for all teachers is the teaching of writing.

2. The successful development of writing ability depends very much on a recognition of the close relationships that exist

among all of the language arts (reading, speaking, listening, and writing).

3. Students should learn to write in order to write to learn.

4. Writing skills are most effectively taught and learned in the context of actual writing.

5. Students should write for different audiences and for different purposes.

6. Students should have experience with the entire spectrum of written discourse (to inform, persuade, inspire, explore, and entertain) in order to develop a command over a wide range of language activities.

7. The analytical study of grammar is useful in discussing with some students the options available to them as they work at improving the structure and style of their sentences in the editing phase of the writing process.

8. Evaluation of writing should take place during each phase of the writing process and should be engaged in by the student writers themselves, with the help of their classmates and instructor.

9. Learning to write is a developmental process that continues past the student's formal schooling period.

10. Student writing should be shared with others.

11. Teachers can help students to become more competent and confident writers. (pp. 2-6)

Perhaps the national forerunner in the development of instructional programs and materials for adult writing has been New York State. In July, 1986, New York State began to require students

to pass a writing sample as part of their state GED requirement. Through various projects a wealth of material has been produced which focuses on writing instruction for adults who are at either a basic level or who are preparing for the GED Test. To help GED teachers, the State University of New York at Albany Two-Year College Development Center (1988), as one product of the Teaching Writing to Adults Resource Series, developed a list of ten Intended Learning Outcomes with accompanying strategies and suggestions and recommended resources for teaching writing to high school equivalency and adult basic education students. These Intended Learning Outcomes are based on research that supports the teaching of writing as a process which includes prewriting, composing, revising, and editing. Also, they are related directly to the criteria of effective writing by which the GED Writing Sample is evaluated. The ten Intended Learning Outcomes are as follows:

After appropriate instruction, the adult student will be able to:

1. Write for different purposes and audiences using a variety of forms and the appropriate level of language.

2. Read, understand, and accurately follow directions related to writing tasks.

3. Develop the content of the writing to demonstrate clear understanding of the purpose of the writing task.

4. Incorporate relevant, specific and appropriate information.

5. Support ideas with specific reasons, examples, and details.

6. Organize writing logically and coherently.

7. Write using specific, clear, vivid, precise, and accurate language.

8. Demonstrate control of the Conventions of Standard Written English with few or no mechanical errors.

9. Revise and edit his/her own writing to improve logical development, clarity and coherence, and word choice so that it conveys the intended message to the reader.

10. Use writing as a tool to process information and reinforce learning in all content areas. (pp. 5-20)

Gilleece (1988) reports that Kingsborough Community College in Brooklyn, New York, has developed a structured writing program for the College's GED students, in response to the concerns by teachers and students over the addition of the writing sample to the GED Test. This particular program is composed of 10 individual work units which provide activity-centered exercises with simple and direct models and examples. Writing skills are separated for each unit and are added layer by layer with "graduated expectations for new adult writers" (p. 5). The units covered are:

1. Brainstorming: Students create lists of writing ideas on selected topics.

2. Eliminating and Organizing: Exercises are used for eliminating ideas that do not fit a topic and for organizing and separating ideas and examples.

3. Outline: Students are asked to memorize a standard four-paragraph outline.

4. Introduction Paragraph: Concentrated on stating the topic clearly, telling the reason for writing, and starting-up exercises.

5. Conclusion Paragraph: Tied to Unit 4 with emphasis on writing conclusions, restating the topic, summarizing, and concluding.

6. Body Paragraphs: Offers 10 methods of proving a point and includes practice in writing sentences that prove.

7. Transitional Expressions: Provides lists and fill-in exercises to give adults experience with transition words.

8. Organizing and Writing the Four-Paragraph Essay: Includes a full-scale walk-through of all the steps in writing a GED essay.

9. Proofreading and Revising: A checklist and several samples are provided with which to practice these skills.

10. Simulation: Representative essay questions are provided to prepare adults for the actual test; 45 minutes is allowed for the whole process. (p. 5)

Vucinich and O'Conlin (1988) developed a handbook to assist GED teachers with ideas that produce effective writing instruction for their students. It gives the teachers "background information about the writing skills GED students need and practical instructional activities for use in the ABE/GED classroom" (p. 2). Their approach utilizes a POWER format which is an acronym for Prewriting, Organizing, Writing, Editing, and Rereading. The focus of this approach is a series of writing tasks that move the student developmentally from the concrete to the abstract to develop the expected skills needed to be successful on the GED essay component.

Staff Development Theory

Perhaps the greatest challenge in many years faced by adult education program planners, staff developers, and trainers is the development and delivery of inservice training to adequately prepare GED instructors to teach writing skills for the essay component of the Writing Skills Test. Many adult educators believe that, at the very least, staff development is needed to help instructors acquire the skills, methods, and techniques necessary to teach the writing process and to give them an understanding of the holistic scoring approach used to grade the essay component. If these two minimum goals are to be realized, then inservice training must be extremely well-designed, developed, and implemented.

Background

The human resource development literature indicates that most of the research done on staff development and inservice training has been carried out in the last 20 years and primarily with teachers of children, not adults. There is, however, a great deal of information that has been generated by the research which is of value to adult education program planners, staff developers, and trainers.

Firth (1977) notes that staff development is a positive force in the improvement of education. He discusses 10 issues which he believes are critical in implementing any program of staff development. Among those 10 issues are the following:

1. The concept of staff development must be accepted as a long-term commitment by school officials and as a hallmark of professionalism by teachers.

2. Common priorities must be squared between those expected by the school officials and those accepted by the teachers.

3. Strategies must foster changes in the learning environment as well as relationships among teachers.

4. Inducements must be established in which the school offers suitable rewards for teachers.

5. Progress must be sustained despite restrictions on school officials and the inertia of some teachers. (p. 221)

Sparks (1983) also believes that staff development is a very promising approach to the improvement of educational instruction. From her viewpoint, staff development is a "nested process" which includes goals and content, the training process, and the organizational context or environment of staff development effort (p. 65). From a review of literature on staff development, Sparks makes the following general recommendations about staff development programs to help ensure more effective teaching:

1. Select content that has been verified by research to improve student achievement.

2. Create a context of acceptance by involving teachers in decision making and providing both logistical and psychological administrative support.

3. Conduct training sessions (more than one) two or three weeks apart.

4. Include presentation, demonstration, practice, and feedback as workshop activities.

5. During training sessions, provide opportunities for small-group discussions of the application of new practices and sharing of ideas and concerns about effective instruction.

6. Between workshops, encourage teachers to visit each others' classrooms, preferably with a simple, objective, student-centered observation instrument. Provide opportunities for discussions of the observation.

7. Develop in teachers a philosophical acceptance of the new practices by presenting research and a rationale for the effectiveness of the techniques. Allow teachers to express doubts about or objections to the recommended methods in the small group. Let the other teachers convince the resisting teacher of the usefulness of the practices through "testimonies" of their use and effectiveness.

8. Lower teachers' perception of the cost of adopting a new practice through detailed discussions of the "nuts" and "bolts" of using the technique and teacher sharing of experiences with the technique.

9. Help teachers grow in their self-confidence and competence through encouraging them to try only one or two new practices after each workshop. Diagnosis of teacher strengths and weaknesses can help the trainer suggest changes that are likely to be successful--and, thus, reinforce future efforts to change.

10. For teaching practices that require very complex thinking skills, plan to take more time, provide more practice, and

consider activities that develop conceptual flexibility.

(p. 71)

Showers, Joyce, and Bennett (1987) reviewed nearly 200 research studies on staff development for the purposes of facilitating cumulative research by allowing current studies to build on previous ones and to locate those areas of research where the results would provide a strong enough base to provide working hypotheses for program design. Their meta-analysis combined with a literature review on staff development produced the following findings:

1. What the teacher thinks about teaching determines what the teacher does when teaching. In training teachers, therefore, we must provide more than "going through the motions" of teaching.

2. Almost all teachers can take useful information back to their classrooms when training includes four parts:
    (1) presentation of theory, (2) demonstration of the new strategy, (3) initial practice in the workshop, and
    (4) prompt feedback about their efforts.

3. Teachers are likely to keep and use new strategies and concepts if they receive coaching (either expert or peer) while they are trying the new ideas in their classrooms.

4. Competent teachers with high self-esteem usually benefit more from training than their less competent, less confident colleagues.

5. Flexibility in thinking helps teachers learn new skills and incorporate them into their repertoires of tried and true methods.

6. Individual teaching styles and value orientations do not often affect teachers' abilities to learn from staff development.

7. A basic level of knowledge or skill in a new approach is necessary before teachers can "buy in" to it.

8. Initial enthusiasm for training is reassuring to the organizers but has relatively little influence upon learning.

9. It doesn't seem to matter where or when training is held, and it doesn't really matter what the role of the trainer is (administrator, teacher, or professor).

10. Similarly, the effects of training do not depend on whether teachers organize and direct the program, although social cohesion and shared understandings do facilitate teachers' willingness to try out new ideas. (p. 79)

Hinson, Caldwell, and Landrum (1989) cite numerous studies that dispute the belief that staff development is effective in facilitating the continuing professional and personal growth in school personnel. They note that among the often cited reasons for the ineffectiveness of staff development are the lack of sincere commitment and participation by teachers and administrators. Furthermore, they suggest that even though all the evidence is not in on staff development programs and practices, there are seven guidelines which can be extrapolated from a general agreement of staff development literature. They identify those guidelines as follows:

1. Involve participants in planning. They should have input into decisions about the content and focus of the activities and the program's method of delivery. The "one shot" approach to staff

development is ineffective and generally produces negative feelings about staff development.

2. Plan for transfer of training. The staff development should attempt to increase the theory or knowledge base of participants and it should be job related.

3. Promote positive participant attitudes. This can be often accomplished by providing incentives for participants and by explaining to the participants that the staff development activities are intended to be supportive and nonjudgmental.

4. Provide support mechanisms. These may take the forms of mentors, small group support and assistance, and instructional supervisors, among others.

5. Develop activity-oriented components. Hands-on activities for participants should be emphasized.

6. Focus initially on results. Initial focus should be on tangible results for participants. Teacher behaviors should possibly be changed before teacher attitudes.

7. Provide for specificity and concreteness. Activities should concentrate on particulars rather than generalities which will produce a better transfer of training.

Pine (1984) believes that one of the key elements for improving the quality of education is the professional development of teachers through, among other things, inservice education. He advocates collaboration in education among public schools, universities, and the state departments of education. Through this collaborative mode, these various educational organizations can redirect existing resources, consolidate resources, and discover mutually beneficial

resources "to improve teacher preparation, inservice education, and the quality of classroom instruction" (p. 3).

Korinek, Schmid, and McAdams (1985) reviewed over 100 documents pertaining to the kinds of inservice education most frequently used with classroom teachers and also the most commonly stated guidelines for producing effective inservice programs (p. 34). From their research, they identified three inservice types most often described or implied in the literature and 14 "best practice" statements. The three inservice types are identified as Type I: Information Transmission; Type II: Skill Acquisition; and Type III: Behavior Change. The purpose of Type I is only to increase the knowledge of the participants. The characteristics of Type I include information presented through lecture, demonstration, or panel discussion with little audience participation in the planning of content or reacting to material during the inservice. Also, this type of inservice appeared to be the most commonly used but the most unpopular with the teachers. The purpose of Type II is to help improve existing skills or to impart new ones. Very seldom are the activities or demonstrations individualized and often the teachers have little input into the planning or choice of activities. The sessions are often scheduled over a few days and activities usually demand active participation rather than passive participation by teachers. The presentation of skill demonstrations is coupled with practice of the new skills. The primary purpose of Type III is to change teacher behavior. Each part of Type III inservice "is built on careful assessment, clear objectives, observation, and record keeping" (p. 36). The willingness of the teachers to take responsibility for changing

their own behaviors is very crucial. Type III is the most costly, time consuming, and requires the greatest commitment from all concerned; it is, however, the least used inservice type.

The "best practice" statements related to the inservice types are:

1. Effective inservice is usually school-based rather than college-based.

2. Administrators should be involved with the training and fully support it.

3. Inservice activity should be offered at convenient times for participants.

4. Inservice should be voluntary rather than mandatory.

5. Rewards and reinforcement should be an integral part of the inservice program.

6. Inservice should be planned in response to assessed needs.

7. Activities which are a general effort of the school are more effective than "single shot" presentations.

8. Participants should help plan the goals and activities of the inservice training.

9. Goals and objectives should be clear and specific.

10. Inservice activity should be directed at changing teacher rather than student behavior.

11. Individualized programs are usually more effective than using the same activities for the entire group.

12. Participants should be able to relate the inservice content to their "back home" situations.

13. Demonstrations, supervised practice, and specific feedback are more effective than having teachers store ideas for future use.

14. Evaluation should be built into inservice activity. (pp. 36-37)

Inservice Training for Adult Learning

Many adult educators believe that staff development programs must be developed that incorporate assumptions and principles of adult learning theory. Jorgenson (1988) explains that most educators that work in ABE are trained as either secondary and/or elementary teachers and that without staff development the principles and techniques they use in the ABE classroom are most likely those associated with educating children. Therefore, she notes, there is a great need for staff development in ABE.

Snyder (1970) has indicated six key elements of inservice training for adult educators. Those elements are that inservice education is considered to be:

1. Purposeful: it has one or more explicit objectives to which the activities are directed.

2. Systematic not random: planning is imperative to determine the objectives and the best ways of accomplishing them.

3. A process: it is generally of a continuous nature with much carry-over from time-to-time.

4. Directed: an individual or individuals provide the leadership or guidance in the planning or direction of the process.

5. For the purpose to effect a change of behavior (learning): individuals are expected to undergo a relatively permanent

modification of their cognitive, affective, or psychomotor characteristics not attributable to temporary states of the individual or maturation.

6. Designed for a target audience: the trainers have specific audiences clearly in mind and their relationship to each other and within the context of their system or organization. (p. 1)

Moore (1988) believes that all staff developers are adult educators because their purpose is to help design programs that help adults to learn. Because of this distinction, she indicates that staff developers can plan better programs if they have a knowledge of adult learning theory and if they use principles and practices of exemplary adult education programs. Among the guidelines she cites for application to staff development programs are that there should be a climate of respect within the classroom, the program should make use of the learners' experiences, staff development presenters and facilitators should be selected on the basis of their knowledge and experience with adult education, needs assessments should be performed, and both formative and summative evaluation of the program should be performed.

The National ABE Staff Development Consortium (1987), as a result of an effort to synthesize much of the expertise of the many staff developers who specialize in the education of Adult Basic and Secondary administrators and instructors, designed a survey instrument "regarding the appropriateness of the principles and techniques derived from recent staff training literature" (p. 1). The instrument was distributed at the national American Association of Adult and Continuing Education (AAACE) conference in Hollywood,

Florida and also mailed to other interested practitioners. A total of 70 statements about staff development principles were included which covered the areas of general principles of staff development, principles for planning staff development, and principles for staff development implementation. A total of 39 statements about ABE staff development techniques were also included.

The statements were rated on a Likert-type scale from a low of zero (not appropriate) to a high of three (very appropriate for ABE). There was also a "no opinion" option on the instrument. Of the 70 principles identified, 17 ranked at an average of 2.7 or more on the scale. Among those principles were the following:

1. Highly ranked general principles stress the importance of a positive climate for professional development, including both physical and psychological comfort. Participants are valued for their experience and professionalism, and activities relate to individual's conceptual framework.

2. Staff development activities are more likely to be successful when the participants choose their involvement and when training is linked to an individual professional development plan.

3. In planning the staff development program, participant and program needs are assessed. Also, participants must know what will be expected of them during these activities, what they will be able to do when the experience is over, and how they will be evaluated.

4. During the training, new practices are clearly and explicitly presented by credible staff developers. Then opportunities

are provided for colleagues to discuss the application of
practices in their ABE programs. (p. 2)

Of the 39 techniques identified, these five were ranked at 2.7 or
above:

1. For teaching practices that require complex thinking skills,
   more time and practice should be provided.

2. Nonjudgmental feedback, support and technical assistance
   are critical when training staff to practice new approaches.

3. Training should reinforce the perception of adult educators
   as "facilitators" (vs. "teachers").

4. ABE curriculum development, improvement of instruction,
   and inservice education should be closely related.

5. A competent ABE staff developer is well organized, knows
   and adheres to the topic, facilitates questions, provides
   opportunity for practice, demonstrates ideas, strategies, and
   materials. (pp. 2-3)

While most inservice training programs are designed for group
activities, Jones (1988) suggests that the needs of many ABE and/or
GED teachers might more effectively be addressed through "individual
professional development plans" (p. 6). He states that these plans
involve the teachers in a variety of self-selected learning experiences
that are directed at their own learning--or teaching needs. The
teachers engage in learning activities which are the result of primarily
self-diagnosed needs. The learning activities might include action
research, dialogue journals between teachers and students, various
types of teacher collaborations, or "I-search" activities which involve

the teacher in structured interviews with learners, teachers, or others.

Inservice Training for the Teaching of Writing

Writing programs, like other educational programs, require inservice training to help keep their instructors knowledgeable of research findings and changes in the field. With the enhanced focus on writing as a tool for learning, staff development for the effective teaching of writing has become increasingly important to educators.

The California State Department of Education (1986) has expressed the belief that for any writing program to be either complete or very effective it must contain the element of staff development. A basic reason for this belief is that few teachers actually receive any pre-service training in the teaching of writing. As part of an attempt to provide California schools with some information for assessing their existing writing programs and designing new programs, the California State Department of Education offered, among other suggestions, the following elements to consider when establishing a staff development program for the teaching of writing:

1. Since the teaching of writing is a complex matter, those who plan the staff development programs should design ongoing efforts which provide for the necessary periods of time rather than single session or "quick fix" approaches.

2. The simple passing of information about effective ways to teach writing should merely be an early step in a staff development program in this area. To ensure that teachers learn how to improve their teaching of writing and that such improvement leads to improved student performance in

writing, it is important that subsequent steps be taken. Teachers should:

a Watch demonstrations of the teaching of newly acquired concepts and approaches in the teaching of writing.

b. Incorporate these concepts and approaches in their own teaching.

c. Have opportunities to share ideas in the teaching of writing with colleagues and to learn from them.

d. Have informed and trusted peers visit their classrooms to ensure that they understand the new concepts and approaches and are employing them effectively in their own teaching.

3. Teachers should have conveniently available to them a professional library regarding the teaching of writing.

4. Teachers should be encouraged to participate in professional organizations, meetings, workshops, and conferences that may enhance their skills and knowledge about the teaching of writing.

5. Teachers should be encouraged to engage frequently in the same writing assignments they give to their students to serve as models, to discover potential roadblocks with assignments, to experience what the student experiences, and to become more aware of the importance of the content and not the mere mechanics of written expression. (pp. 39-40)

Dauzat and Dauzat (1987) indicate that the changes in the GED Test will mean that adult educators must design staff development activities to:

1. Develop plans for stressing interrelationships between and among content areas throughout the GED curriculum.

2. Assist adult educators in techniques for teaching cognitive skills beyond knowledge acquisition to critical thinking skills.

3. Assist adult educators to acquire methods and techniques for teaching the writing process.

4. Teach holistic scoring methods for student essays.

5. Promote student skill in writing on given topics in each content area.

6. Assign student writing tasks to require varying rhetorical modes across the content areas. (p. 30)

As a result of the introduction of the essay component to the GED Writing Skills Test, numerous inservice education documents whose focus is this new test addition have recently appeared in the literature. Hammond and Mangano (1986), as part of New York State's effort to "enhance regional capacity for providing inservice training to local instructors teaching writing in preparation for the new GED exam" (p. 1), developed a two-day centralized training session to train 40 adult educators to serve as peer teacher-trainers who, in turn, would provide ongoing inservice to colleagues in their respective regions. As part of that project they produced an inservice training manual. Topics covered in the actual training and in the manual include an explanation of the GED writing sample, holistic scoring and the GED Test, managing the instructional program, the writing process, further instructional strategies, and planning and managing an inservice workshop.

In a handbook developed by the University of New Mexico (1987) for use with the staff development videotape: Introducing Writing into the GED Classroom, whose main purpose is the development of teaching skills to help instructors prepare their students for the essay component of the GED Writing Skills Test, there are six tasks of the trainer identified to help facilitate the writing inservice. Those tasks are:

1. To create and maintain a learning environment.

2. To keep the flow of information and activity purposeful and continuous.

3. To present information.

4. To process information by listening to participants and integrating their contributions into the content.

5. To direct and monitor activities.

6. To manage individual participation by keeping the group interacting positively.

Summary

The addition of the essay component to the GED Writing Skills Test has been the stimulus for many GED instructors to express a heightened concern over their lack of preparation to meet the challenge of providing adequate writing instruction to their students for this new test addition. Those concerns have been noted by numerous local and state adult educators, program planners, and curriculum developers. One way to address these concerns is through effective inservice training.

The purpose of this chapter has been to review literature in the areas of the development of the addition of the essay component to

the GED Writing Skills Test, the nature of the essay component, writing theory, adult learning theory, and staff development theory. As this review of literature has shown, writing research can be classified according to its focus on writing as a product or on writing as a process. The product approach centers on teaching writing rules, focussing on writing's component parts: grammar, mechanics, punctuation, and rhetoric. The process approach, which includes the social context perspective, centers on the developmental aspects of writing with a focus on a more holistic viewpoint. Teachers most often work with students individually or in small groups; they often write with the students; they emphasize the recursive nature of writing; and, they stress the importance of writing as an act of communication with an audience.

Also, this review of literature has indicated that recognized principles of adult learning include the following: instructors are facilitators of learning; adults have a variety of learning styles; adult learning must be personal and have immediate application; life experiences of adults are important for learning; instructors should provide both physical and psychological comfort for the learner; adult learning should move toward self-direction; motivation for learning should be more intrinsic than extrinsic; and, the stages, roles, and tasks of adult development are important to the process of adult learning.

Furthermore, this review of literature has shown that characteristics of successful and effective staff development include involving teachers in decision making and planning; presenting theory, demonstrating strategies, and providing feedback;

incorporating principles of adult development; increasing the knowledge base of participants; offering rewards or incentives to participants; addressing long and short-term needs of teachers; and, spacing the training over time.

This review of literature is related to the overall purpose of the study which is to help develop a stronger foundation for the future inservice training of GED instructors in Virginia who teach writing skills for the essay component of the Writing Skills Test. The review of literature, then, served as the foundation for the theoretical framework which guided the development of this study.

CHAPTER III

METHODOLOGY

Statement of Purpose

The purpose of this study was to determine the demographic characteristics, instructional approach, perceptions toward inservice training, and awareness and use of adult education theory/principles of public-school affiliated GED instructors in Virginia who teach writing skills for the essay component of the GED Writing Skills Test. An additional purpose of the study was to compare student performance on a sample of GED essays to determine the relationship of student performance with teacher demographic characteristics and teacher instructional approach as identified by the product and process scale scores.

Research Questions

Based on the review of literature, the following research questions are posed for this study:

1. What are the demographic characteristics of: (a) the respondents from the defined population of GED instructors in Virginia who teach writing skills for the essay component of the Writing Skills Test, (b) the sub-group of teachers who identified students who were first-time test takers of the GED Test in December 1990; and, (c) do these teachers differ significantly in terms of their demographic characteristics?

2. (a) What instructional approach to the teaching of writing for the essay component do these GED teachers identify themselves as using; and, (b) how do these GED teachers score on the product and process scales?

3. What is the relationship between selected teacher demographics and the instructional approach of the GED teachers as defined by the scale scores?

4. What is the relationship between selected teacher demographics and student performance on the essay component?

5. What is the relationship between student performance on the essay component and GED teacher instructional approach as defined by the scale scores?

6. What are the perceptions of the GED teachers toward inservice training for the essay component?

7. What are the perceptions of the GED teachers toward an awareness and use of adult learning theory/principles in the GED classroom?

Definition of Terms

For the purposes of this study, definitions of the more important terms are provided here to clarify their meaning.

1. Adult Education: Services or instruction below the college level of adults who: (a) are not enrolled in secondary school; (b) lack sufficient mastery of basic educational skills to enable them to function effectively in society or do not have a certificate of graduation from a school providing secondary education and have not achieved an equivalent level of education; and (c) are not currently required to be enrolled in school.

2. Adult Basic Education: Adult education for adults who are functioning at or below the 8th grade level in basic academic subjects (reading, writing, speaking, and mathematics).

3. GED Tests: The tests of General Educational Development (Writing Skills, Social Studies, Science, Interpreting Literature and the Arts, and Mathematics).

4. GED Combination Class: A GED class in which subject matter for two or more of the individual components of the GED Test is taught. For this study, subject matter for the Writing Skills Test must be one of these components.

5. GEDTS: The General Educational Development Testing Service of the American Council on Education.

6. GED Writing Skills Test: Test 1 of the GED tests (introduced in 1988).

7. Inservice Training: Planned educational activities provided to teachers to help them improve their teaching by acquiring or upgrading necessary knowledge, skills, techniques, and practices.

8. Virginia Public-School Affiliated GED Teacher: A GED teacher who works in a GED program offered through the Virginia public school system.

Design

This study used a non-experimental, descriptive design to determine the demographic characteristics, instructional approach, perceptions toward inservice training, and awareness and use of adult education theory/principles of public-school affiliated GED instructors in Virginia who teach writing skills for the essay component of the GED Writing Skills Test. This study also compared student

performance on a sample of GED essays to determine the relationship of student performance with teacher demographic characteristics and teacher instructional approach as identified by the process and product scale scores.

Survey Subjects

The subjects for this study were chosen based on three criteria: (1) they were teachers within a Virginia public-school affiliated GED program, (2) they taught writing skills for the essay component either as part of a GED combination class or as a separate class unto itself, and (3) the program in which the teachers were employed was reimbursed through General Adult Education Funds of the Office of Adult Education of the Commonwealth of Virginia's Department of Education. These criteria eliminated teachers in private business programs, proprietary schools, and volunteer or tutor GED programs. These criteria also narrowed the population by eliminating from the study teachers in GED programs maintained, supported, or reimbursed through other state monies.

Through the cooperation of the Office of Adult Education of the Virginia Department of Education, a preliminary list of the names of 149 GED teachers was compiled for use as survey subjects in this study. After contacting the GED Program Director in each of the school divisions included in the study, the final list of teachers was enlarged to 169. Since a considerably larger number of subjects had been anticipated, it was decided that random sampling procedures would not be used and, therefore, the entire population of 169 GED teachers was surveyed. From this surveyed population, there were 140 returned questionnaires of which 27 were unuseable for statistical

analysis because the respondents indicated that they either no longer worked as GED teachers, or that they no longer taught writing skills for the essay component. Within this group of 113 respondents, there was a sub-group of 30 respondents who identified students who were first-time GED test takers in December 1990.

Instrumentation

A survey questionnaire (see Appendix A) was developed by the researcher and contained five sections. The development of the questionnaire was facilitated by the use of Dillman's Total Design Method (1978) for formatting questionnaires and conducting survey research.

To help assure content validity of the instrument, it was submitted to a group of six highly knowledgeable professional adult educators in the state. Three of the individuals chosen were adult education program directors; two of the individuals were university faculty who had many years of experience as adult education teachers and inservice trainers; and, one individual was chief GED Examiner for the State of Virginia. Each of the persons was sent a copy of the survey questionnaire which had already been revised based on recommendations resulting from the researcher's dissertation prospectus hearing. These experts were asked to review the questionnaire and complete and return a checklist form (see Appendix B) which supplied information about the questionnaire in the areas of coverage of subject, format, directions, item bias, wording of items, time length to complete survey, and any other miscellaneous comments. The responses from these experts were utilized to make a second instrument revision. Although there were no major

recommended changes in content or format by these experts, two of the respondents indicated ambiguity in some of the items.

To further assure content validity of the questionnaire, the second revised instrument was field tested with a group of seven GED instructors who teach writing skills for the essay component of the GED Writing Skills Test. These teachers were asked to review the questionnaire and to also complete and return the survey checklist. Five of the seven teachers returned the checklist and their recommendations were utilized to prepare a third revised instrument which was disseminated to the survey subjects. Guided by their recommendations, the only changes effected were minor wording modifications in some of the items.

Section I of the five-part questionnaire was designed to gather demographic data about the teachers' background and experience. Questions were both closed and open ended and covered areas such as gender, ethnicity, age, educational background, undergraduate major, background as a GED instructor and participation in training for the teaching of writing and in adult education principles/theory.

Section II of the survey was designed to determine if the teachers' approach to the teaching of writing was product-based, process-based, or utilized a combination of the two. Teachers were asked to respond to each of 16 statements that most nearly approximated their practice. Each statement was answered by indicating one of five possible Likert-type scale choices which included "Strongly Disagree," "Disagree," "Don't Know," "Agree," and "Strongly Agree." The teachers were also asked to respond to a final statement (17th) in which they were asked to identify the approach to

the teaching of writing skills for the essay component which they used in their GED classroom. They were given the choices of "Process Approach," "Product Approach," "Combination Approach," and "None of the Above Approaches."

Section III of the survey was designed to determine the teachers' perceptions toward inservice training for the essay component. Teachers were asked to demonstrate their extent of agreement with each of 16 statements by selecting one of five possible Likert-type scale responses which again ranged from "Strongly Disagree" to "Strongly Agree." The statements covered areas such as the planning, development, implementation, and content of inservice training.

Section IV of the survey was designed to determine the teachers' awareness and use of adult education theory/principles in the GED classroom. Teachers were asked to demonstrate their extent of agreement with each of 15 statements by selecting one of five possible Likert-type scale responses which again ranged from "Strongly Disagree" to "Strongly Agree." The statements covered areas such as characteristics of adult learners and the use of adult education principles in the classroom.

Section V of the survey requested teachers to supply the name and/or social security number of their students who took the GED Test in December 1990 and who were first time test-takers. This information was the basis for determining the sub-group of teachers, because it was not anticipated that all of the teachers surveyed would either identify their students or even have students who met the identification criteria.

Following Section V, there was an open comments area where the GED teachers were given the opportunity to write comments, suggestions, or criticisms which they believed would be helpful to the researcher.

Survey Procedure

Packets containing an introductory letter from the researcher, a cover letter from both the Associate Director of the Office of Adult Education of the Virginia Department of Education and the Chief GED Examiner for the state, the survey questionnaire, and a stamped return envelope were sent to each of the 169 identified teachers on January 11, 1991. The researcher's introductory letter explained the focus of the study, informed the teachers that their local GED administrator had been contacted about the study, assured the teachers of the confidentiality of the information they provided, and asked them to return the questionnaire by January 31. The cover letter expressed support by the Office of Adult Education for the study, asked for the teachers' cooperation with the study, and assured them of confidentiality. The purpose of the cover letter was to give the study a higher level of credibility than if the researcher had undertaken the project on his own merits. The questionnaire was coded to assure confidentiality and to monitor response return. When the response deadline arrived, 76 questionnaires (44.9%) had been received.

On February 5, a reminder letter with extra postage (postage rates had increased) was sent to all survey subjects which thanked all of those persons who may have returned the questionnaire and urged those persons who may not have yet returned the questionnaire to do

so by February 16. The letter also informed the subjects that they could call the researcher [collect] if they did not receive a questionnaire and one would be forwarded to them. When the response deadline arrived, 30 additional questionnaires had been received, raising the total response rate to 62.7%.

Four days after the second deadline date had expired, on February 20, a letter and replacement survey questionnaire with a stamped return envelope were sent to the 63 GED teachers who had not yet returned their questionnaires. The letter informed them that their questionnaire had not yet been received and asked them to please take the time to complete and return the enclosed questionnaire by March 2.

Also on February 20, a letter was sent to 29 local GED administrators with the names of the teachers in their region who had not yet returned their questionnaires. The letter thanked the administrators for their previous assistance and asked them to review the list of names and to please encourage their teachers to return their questionnaires by March 2.

As a result of the final mailing to the 63 teachers and of the letter to the 29 administrators, 34 additional questionnaires (20.1%) were received by March 2. This made a total of 140 returned questionnaires out of 169 originally mailed. The final total response rate was 82.8%. An additional four questionnaires were received 5-10 days after the final March 2 deadline, but were not included in the received response percentage and were not included for data analysis.

All returned questionnaires were forwarded to the Survey Research Lab of Virginia Commonwealth University where data were

entered from the questionnaires and sent to the mainframe computer for purposes of data analysis.

Data Analysis

Teacher responses to statements about their demographic characteristics, approach to teaching writing skills for the essay component, perceptions toward inservice training for the essay component, and perceptions about their awareness and use of adult education theory/principles comprised part of the data for this study. Other data used in this study included the GED essay scores of students identified by their teachers as first-time GED test takers in December 1990. These scores were obtained from the Official GED Test Answer Sheet of each identified student which was provided by the Office of Adult Education of the Virginia Department of Education.

The statistical analysis of the data employed both descriptive and inferential statistics. The statistical packages SAS Version, 5th Edition, (1985) and SPSSX, 3rd Edition, (1988) were used for the analyses. Statistical significance was set at the alpha = .05 level for this study.

A separate process and product scale score was determined for each respondent. Of the 16 Likert-type scale response statements in Section II of the survey questionnaire, eight were associated with a process approach to the teaching of writing and eight were associated with the product approach. Statements 1, 3, 5, 7, 9, 11, 13, and 15 were associated with the process approach and statements 2, 4, 6, 8, 10, 12, 14, and 16 were most closely associated with a product approach. Numerical values from one to five were assigned to each of the five Likert-type anchors: Strongly Disagree (SD) = 1, Disagree (D)

= 2, Don't Know (DK) = 3, Agree (A) = 4, and Strongly Agree (SA) = 5. To determine the process scale score for a teacher, the teacher's responses were summed across the eight process approach indicator statements. To determine the product scale score for a teacher, the teacher's responses were summed across the eight product approach indicator statements. A teacher's process or product scale score could have ranged between eight and forty. Once each teacher's process and product scale score had been determined, the teacher was then identified as having a high or low process or product instructional approach to the teaching of writing as defined by the scale scores.

The variables used in this study were:

Independent Variables

1. Group Membership (two levels): teachers who identified students and teachers who did not identify students.

2. Group Membership (two levels): teachers who scored high on the product scale and teachers who scored low on product scale.

3. Group Membership (two levels): teachers who scored high on the process scale and teachers who scored low on the process scale.

4. Teacher demographic characteristics

Dependent Variables

1. Categorical Demographic Variables

2. Continuous Demographic Variables

3. Product Scale Scores

4. Process Scale Scores

5. Student Averaged Essay Test Scores

Descriptive statistics which included frequencies, means, percentages, and standard deviations were used to analyze the data on teacher demographics, teacher self-report instructional approach, product and process scale scores, students' averaged essay test scores, teacher perceptions toward inservice training for the essay component, and teacher perceptions about the awareness and use of adult learning theory/principles in the GED classroom.

Inferential statistics utilized included Analysis of variance (ANOVAs), Chi-squares, and Stepwise Multiple Regression Analysis. ANOVAs were used to determine if statistically significant differences existed between: (1) groups of teachers in terms of their continuous demographic variables; and (2) groups of teachers who were classified as scoring high or low on the product and process scales in terms of their students' mean essay scores.

Chi-square statistics were used: (1) to determine if the sub-group of teachers who identified students was statistically equivalent to the group of teachers who did not identify students in terms of categorical demographic variables; and, (2) to compare the teachers' product and process group membership as defined by scale scores with their self-report classifications to determine how many teachers used a combination instructional approach based on scale score classifications.

The Stepwise Multiple Regression Analysis Method was used: (1) to determine which teacher demographic variables were useful to predict product scale scores, (2) to determine which teacher demographic variables were useful to predict process scale scores;

and, (3) to determine which teacher demographic variables were useful to predict student averaged essay test scores.

Preparation of the data for the multiple regression analyses necessitated the dummy coding of four categorical demographic variables. These four variables were grade level taught, type of training in teaching writing to adults, type of training in adult education theory/principles, and type of training in teaching writing skills for the essay component. Respectively, these four variables were dummy coded as follows:

1. GRADDUM: 1 = teach senior high school

0 = not teach senior high school

2. ADDUM: 1 = have taken course(s)

0 = not taken course(s)

3. THEDUM: 1 = have had workshop(s)

0 = not had workshop(s)

4. ESDUM: 1 = have had workshop(s)

0 = not had workshop(s)

The designation of the dichotomous categories for the dummy coded variables ADDUM, THEDUM, and ESDUM were contingent on having a sufficient number of respondents in both the teacher group and the teacher sub-group for use in the regression analyses.

Of the 19 demographic variables identified for this study, 14 were categorical variables and 5 were continuous variables. Only one variable was entirely eliminated from the analyses in the study; that variable was teaching status and it was excluded because there was not adequate representation in the level of part-time teacher for either the teacher group or sub-group. Any other variable that was not used

in a particular statistical analysis is noted in the text of that statistical procedure.

To increase the sample size for the regression procedures, means were substituted for cases with missing data on three of the continuous variables for both the teacher group and the teacher sub-group. The mean substitutions were calculated on data from respondents not missing these variables. The three continuous variables and the calculated mean substitutions are as follows:

Teacher Group:

a. Hours per week teaching writing skills for the essay component (N=103, M=2.84)

b. Weeks per year teaching GED coursework (N=102, M=33.47)

c. Age of respondent (N=108, M=43.56)

Teacher Sub-group:

a. Hours per week teaching writing skills for the essay component (N=27, M=3.15)

b. Weeks per year teaching GED coursework (N=24, M=36.67)

c. Age of respondent (N=27, M=42.37)

Product and Process Scale Reliabilities

For the GED teachers within the identified population who responded to all scale items, Cronbach Alpha coefficients were computed for both the product and process scales, in order to obtain an estimate of their reliability. As McMillan and Schumacher (1984) state, "The Cronbach Alpha is generally the most appropriate type of reliability for survey research and other questionnaires in which there is a range of possible answers for each item" (p. 129).

For the eight items on the product scale, the Cronbach Alpha reliability coefficient was determined to be .63. For the eight items on the process scale, the Cronbach Alpha reliability coefficient was determined to be .52.

Limitations of Study

Although there is a substantial amount of research available on the teaching of writing, on inservice training, and on adult learning, and a growing body of research on teaching writing to adults, there is much less research available in these areas when applied to GED Test instruction and preparation. As in this study, when the GED Test focus is narrowed to only the essay component of the Writing Skills Test, efforts to explore literature on directed research efforts within these areas is hindered by a lack of research.

This study was limited to Virginia public-school affiliated GED teachers who teach writing skills for the essay component of the Writing Skills Test either as part of a GED combination class or as a separate class unto itself, and whose GED program is reimbursed through General Adult Education Funds of the Office of Adult Education of the Commonwealth of Virginia's Department of Education. The results of the study were not generalizable to other adult education programs or other instructional programs for the GED Test. This limitation concerned the study's external validity.

Other limitations to the study include the use of a self-designed instrument which is a threat to validity when developed by the researcher (McMillan & Schumacher, 1984). Also, researcher bias is a limitation; as Leedy (1980) states, "It can infect the descriptive survey more easily than most other methodological genres because it

is sometimes difficult for the researcher to detect" (p. 124). Kerlinger (1973) warns of the possibility of "response-set variance" from respondents when the researcher uses a Likert-type scale to determine a set of attitudes. He notes that individuals sometimes have a predilection to rate statements by using extreme responses, neutral responses, agree responses, or disagree responses.

A further limitation to the study was the use of the GED student essay score as a general indicator of student writing ability without use of the multiple-choice component of the Writing Skills Test, because alone, the essay component has been shown to have low reliability. Also, the moderately low product and process scale reliabilities were a limitation to the study.

CHAPTER IV

FINDINGS

Introduction

The results of the statistical analyses of the data for this study
are reported in this chapter. The statistical analyses include both
descriptive and inferential statistics.

Description of the Survey Subjects

The subjects of this study consisted of the 113 respondents
from the surveyed population of 169 Virginia public-school affiliated
GED teachers who teach writing skills for the essay component of the
Writing Skills Test either as part of a GED combination class or as a
class unto itself and whose GED program is reimbursed through
General Adult Education Funds of the Office of Adult Education of the
Commonwealth of Virginia's Department of Education. This group of
individuals was designated as Group R. In addition, for some analyses,
a sub-group of individuals from Group R, designated as Sub-group T,
was utilized which consisted of the 30 teachers who identified to the
researcher their students who took the GED test in December 1990 as
first-time test takers.

Response Rate

Of the 169 questionnaires originally sent to the population of
GED teachers there were 140 responses, representing an 82.8%
overall response rate. Twenty-seven of the returned questionnaires

were unusable for statistical analysis because the respondents indicated that they either no longer worked as GED teachers, or that they no longer taught writing skills for the essay component. Therefore, there were 113 usable questionnaires, representing a 66.8% reportable return rate for Group R.

Except in the cases where data were dummy coded for purposes of the regression analyses, whenever a respondent failed to complete an item or failed to indicate any response to an item, the result was incomplete or missing data. These non-responses were eliminated from the data before the data were analyzed. Because of the elimination of this data, some of the tables for Group R do not total 113 responses and some of the tables for Sub-group T do not total 30 responses.

School Division Characteristics

There were 72 public school divisions included in this study of which 62 (86.1%) were represented by responses. Of these 72 public school divisions, 49 (68%) were county school divisions which employed 108 (64%) of the teachers in the study while 23 (32%) were city school divisions which employed 61 (36%) of the teachers in the study. While 41 of 49 county school divisions were represented by responses, an 83.7% response rate for counties, 21 of 23 city school divisions responded, representing a 91.3% response rate for cities. Moreover, 94 of the 108 teachers (87%) employed by county school divisions returned the survey questionnaire while 46 of the 61 teachers (75.4%) employed by city school divisions returned the survey questionnaire. Of the 94 returned questionnaires by teachers employed by county school divisions, 17 (18.1%) were unusable for

statistical purposes while of the 46 returned questionnaires by teachers employed by city school divisions, 10 (21.7%) were unusable for statistical purposes.

Statistical results for the seven research questions are presented in this section. The findings are presented in seven individual sections corresponding to the seven proposed research questions. Both descriptive and inferential statistics, including frequency counts, means, chi-squares, analyses of variance (ANOVAs), and multiple regressions were utilized. Statistical significance for this study was set at the $p<.05$ level. Tables which are not specifically referenced in the text, but which supply additional data from the study are found in Appendix C.

Question 1

What are the demographic characteristics of: (a) the respondents from the defined population of GED instructors in Virginia who teach writing skills for the essay component of the Writing Skills Test (Group R), (b) the sub-group of teachers who identified students who were first-time test takers of the GED Test in December 1990 (Sub-group T); and (c) do these teachers differ significantly in terms of their demographic characteristics?

To facilitate the concise reporting of the demographic data, the nineteen demographic variables were individually assigned to one of three appropriately corresponding broader categories of demographic information. Category A was general demographic information about the respondents and included the variables of gender, race, age, educational background, undergraduate major, teach in public school, grade level taught, and membership in adult education professional

organization. Category B was GED teacher specific information about the respondents and included the variables of years as a GED teacher, hours per week teaching GED coursework, weeks per year teaching GED coursework, hours per week teaching writing skills for the essay component, and GED teacher status. Category C was training information about the respondents and included the variables of training in teaching writing skills to adults, type of training in teaching writing skills to adults, training in adult education theory/ principles, type of training in adult education theory/principles, training in teaching writing skills for the essay component, and type of training in teaching writing skills for the essay component.

An overview for each of the three categories is presented which highlights the most essential data contained within each category for both Group R and Sub-group T.

Category A: General Demographic Information

The results of the general demographic information indicated that the general demographic profile for both Group R and Sub-group T was very similar and exhibited the following characteristics: (1) a majority of the respondents were female, (2) nearly 80% of the respondents were white, (3) a majority of the respondents were between 31-50 years of age with the 41-50 age bracket showing the greatest number of respondents, (4) the respondents exhibited a high degree of formal education with over 50% of them holding a Master's degree, (5) while there was quite a diversity of undergraduate majors among the respondents, those who were Education majors accounted for approximately 40%, (6) approximately 50% of the respondents indicated that they did currently teach in the Virginia public-school

system, (7) of those respondents that did currently teach in the Virginia public-school system, most of them taught at the senior high school level, and (8) over 60% of the respondents indicated that they were not a member of any adult education professional organizations.

Category B: GED Teacher Specific Information

As was the case with Category A, the results of the information for Category B indicated that the GED teacher specific information profile was very similar for both Group R and Sub-group T. The following characteristics were shared by Group R and Sub-group T: (1) over 90% of the respondents were part-time GED teachers, (2) most of the respondents reported that they had two to five years of GED teaching experience, (3) most of the respondents taught between 31 and 40 weeks per year of GED coursework, (4) most of the respondents indicated that they taught less than 5 hours of GED coursework per week, and (5) most of the respondents reported that they spent less than two hours per week teaching for the essay component.

Category C: Training Information

The results of the information for Category C indicated similar characteristics related to training for both Group R and Sub-group T. Those similar characteristics included the following: (1) a majority of the respondents indicated that they had received training in the teaching of writing to adults, (2) most of the respondents who had received training in the teaching of writing to adults had received that training through attending workshops, taking courses, or attending inservices, respectively, (3) a majority of the respondents reported that they had received training in adult education/theory principles,

(4) most of the respondents who had received training in adult education theory/principles had received that training through attending workshops, taking courses, or attending inservices, respectively, and (5) less than 47% of the respondents had received training in teaching writing skills for the essay component. Of those respondents in Group R who had received training in teaching writing skills for the essay component, the primary method of receiving the training was through attending inservices. For the respondents in Sub-group T, the primary method of receiving the training was through attending workshops.

Since Sub-group T was to be used separately for later analyses, it seemed necessary to determine if this sub-group of teachers who had identified students who were first-time GED test takers in December 1990 (teachers who identified students) was statistically equivalent to the remaining group of teachers within Group R who did not identify students, in terms of their demographic characteristics. For 13 categorical demographic variables, chi-square statistics were run with the classification variable of group membership. The 13 categorical demographic variables (dependent) were: race, education, gender, undergraduate major, teach in public school, grade level taught, training in teaching of writing to adults, training in adult education theory/principles, training in teaching writing for the essay component, member of professional adult education organization, type of training in teaching writing to adults, type of training in adult education theory/principles, and type of training in teaching writing skills for the essay component. The classification variable (independent) had two levels, teachers who identified students and

teachers who did not identify students. For seven of the categorical variables (education, undergraduate major, race, grade level taught, type of training for teaching writing to adults, type of training in adult education theory/principles, and type of training in teaching writing skills for essay component), response categories were combined in order to compute chi-square statistics. However, for the variable of type of training for the teaching of writing skills for the essay component, two of the four cells had fewer than five respondents indicating that the chi-square may not be a valid test for this variable. The results of chi-square analyses showed no statistically significant differences between the two groups of teachers in terms of the thirteen categorical demographic variables ($p>.05$). The two groups, then, were essentially equivalent in terms of their categorical demographic characteristics.

For the five continuous demographic variables, ANOVA procedures were performed with the classification variable of group membership. The five continuous demographic variables (dependent) were: age of GED teachers, years as a GED teacher, hours per week teaching GED coursework, hours per week teaching writing skills for the essay component, and weeks per year teaching GED coursework. The classification variable (independent) was group membership with the two levels of teachers who identified students and teachers who did not identify students. As indicated by Table 4.1, significant differences were found for years as a GED teacher and hours per week teaching GED coursework ($p<.05$). No significant differences were found for the other continuous demographic variables.

Table 4.1

ANOVA Table for the Comparison of Five Continuous Demographic

Variables for Teachers Who Identified Students and Teachers Who

Did Not Identify Students

Demographic Variable	Source of Variation	df	SS	MS	F	p
Age	Between	1	50.57	50.57	0.48	0.488
	Within	106	11066.10	104.40		
Years GED Teacher	Between	1	103.21	103.21	5.46	0.021*
	Within	111	2099.25	18.91		
Hours per Week Teaching GED Coursework	Between	1	465.75	465.75	9.26	0.003*
	Within	110	5531.68	50.29		
Hours per Week Teaching Writing Skills for Essay Component	Between	1	3.37	3.37	0.37	0.547
	Within	101	932.14	9.23		
Weeks per Year Teaching GED Coursework	Between	1	320.59	320.59	2.59	0.111
	Within	100	12366.82	123.69		

*$p < .05$

An examination of the means resulting from these analyses

(Table 4.2) indicates that teachers who identified students had

significantly more years of experience as GED teachers than did those

teachers who did not identify students. In addition, the analyses

indicate that teachers who identified students spent a significantly

greater number of hours per week teaching GED coursework than did

the teachers who did not identify students.

Table 4.2

Descriptive Statistics for the Comparison of Teachers Who Identified

Students and Teachers Who Did Not Identify Students in Terms of

Five Continuous Demographic Variables

Demographic Variable	Teachers Who Identified Students			Teachers Who Did Not Identify Students		
	N	Mean	S.D.	N	Mean	S.D.
Age	27	42.37	8.23	81	43.95	10.78
Years as GED Teachers	30	6.76	5.04	83	4.60	4.07
Hours per Week Teaching GED Coursework	30	11.80	9.58	82	7.19	5.94
Hours per Week Teaching Writing Skills for Essay Component	27	3.14	2.23	76	2.73	3.27
Weeks per Year Teaching GED Coursework	24	36.66	10.33	78	32.48	11.34

Because the sub-group of teachers who had identified students

(Sub-group T) was essentially equivalent in terms of their

demographic characteristics (except for the two variables reported) to

the group of teachers within Group R who did not identify students, it

was determined that it was feasible to employ Sub-group T and/or

Group R for some of the later analyses.

Summary of Question 1

This section reported the results of the analysis of the demographic data for the respondents. The demographic variables associated with this study were divided among three general information categories for organizational and reporting purposes: general demographic information, GED teacher specific information, and training information. The resultant demographic profile of the respondents indicated that Group R and Sub-group T shared many similar demographic characteristics within each of the categories.

Chi-square and ANOVA procedures were performed on the demographic variables with the classification variable of group membership. Results indicated that except for the variables of years as a GED teacher and hours per week teaching GED coursework, the teachers within Group R who identified students who were first-time GED test takers in December 1990 (Sub-group T) had essentially equivalent demographic characteristics as the group of teachers within Group R who did not identify students.

Question 2

(a) What instructional approach to the teaching of writing for the essay component did these GED teachers identify themselves as using; and, (b) how did these GED teachers score on the product and process scales?

Identification of Instructional Approach

The GED teachers were asked to identify themselves as to what instructional approach they utilized in their teaching of writing skills for the essay component of the Writing Skills Test.

In both Group R and Sub-group T, the majority of the respondents identified themselves as using a combination approach to the teaching of writing for the essay component; after the combination approach, the remaining respondents identified themselves as using the process approach and then the product approach, respectively.

Respondents' Scores on the Product and Process Scales

Product and process scale scores were computed for respondents in both Group R and Sub-group T using their responses to statements in Section II of the research questionnaire. For the respondents in Group R, the range of scores on the product scale was from a low of 8 to a high of 29 with a mean product scale score of 18.26; the range of scores on the process scale was from a low of 18 to a high of 40 with a mean process scale score of 28.40. For the respondents in Sub-group T, the range of scores on the product scale was from a low of 8 to a high of 29 with a mean product scale score of 16.56; the range of scores on the process scale was from a low of 19 to a high of 34 with a mean process scale score of 28.85. On both the product and process scales, the lowest possible attainable score was an 8 and the highest possible attainable score was a 40. An examination of the mean score on each scale for both Group R and Sub-group T suggests that the respondents scored higher on the process scale than on the product scale, since they tended to endorse process items to a greater degree, as measured by these scales.

In order to form two essentially equal groups of respondents for Group R, it was determined that all teachers who scored 19 or above were considered as scoring high on the product scale and all teachers that scored 18 or lower were considered as scoring low on the

product scale. Also, all teachers that scored 29 or above were considered as scoring high on the process scale and all teachers that scored 28 or lower were considered as scoring low on the process scale. When these same cut-off score criteria were applied to Sub-group T, the high and low categories on both the product and process scales had unequal sample numbers.

Given the overwhelming number of respondents whose self-reported instructional approach indicated that they used a combination of the product and process approaches to teach writing skills for the essay component, it seemed necessary to compare the respondents' self-identified combination group membership with their group membership based on the scale score classifications to determine the accuracy of their self perceptions. Two sets of analyses were performed.

The first set of analyses were performed for Group R. A 2 x 2 chi-square analysis was performed for the two variables of product group membership and process group membership resulting in four categories: High Process/Low Product, High Product/Low Process, Low Process/Low Product, and High Process/High Product. Respondents who were classified as High Process/High Product or Low Process/Low Product were considered as using a combination approach. These two categories were combined to report results. Those teachers who were High Process/Low Product were considered as using a process approach. Teachers who were classified as High Product/Low Process were considered as using a product approach.

As indicated in Table 4.3, the results of the chi-square analyses for Group R revealed a significant relationship between product group

membership and process group membership ($p<.05$). The correlation of product scale scores with process scale scores yielded r = -.287, p = .006, and n = 90. An examination of the four cell frequencies and percentages indicated that (after combining High Product/High Process and Low Product/Low Process categories) 37.8% of the respondents were High Product/Low Process, 31.1% were High Process/Low Product, and 31.1% were using a combination of the two instructional approaches consistently, either at a high or a low level. As determined by the scale scores, the respondents were disproportionately distributed among the four categories. Whereas approximately one-third of the respondents were designated as process-oriented and another one-third of the respondents were designated as product-oriented, the remaining one-third of the

Table 4.3

Comparison of Product and Process Group Membership for Respondents in Group R as Defined by Scale Scores

Category	N	%	Chi-square	p
High Process/Low Product	28	31.1	12.84	.001*
High Product/Low Process	34	37.8		
High Process/High Product	12	13.3		
Low Process/Low Product	16	17.8		
Total	90	100.0		

*$p<.05$

respondents were closely divided between the two categories of those who used both approaches at either a low level or a high level.

The second set of analyses were performed for Sub-group T. Again, a 2 x 2 chi-square analysis was performed for the two variables of product group membership and process group membership which resulted in one category designated as product-oriented, one category designated as process-oriented, and the two combined categories representing a combination approach to the teaching of writing skills for the essay component. The results of the chi-square analyses for Sub-group T revealed no statistically significant relationship between product group membership and process group membership ($p>.05$). The correlation of product scale scores with process scale scores resulted in $r = -.098$, $p = .64$, and $n = 25$. An examination of the four cell frequencies and percentages indicated that 36% were High Process/ Low Product, 24% were High Product/Low Process, and 40% of the respondents were using a combination of the two approaches consistently, either at a high or a low level.

A comparison of the distribution of respondents in Group R by self-identified instructional approach with the distribution of respondents in Group R by scale score group membership indicated that while 79.6% of the respondents identified themselves as using a combination approach, only 31.1% of those respondents were categorized as employing a combination approach as determined by the scale scores. Similarly, a comparison of the distribution of respondents in Sub-group T by self-identified instructional approach with the distribution of respondents in Sub-group T by scale score group membership indicated that while 80% of the respondents

identified themselves as using a combination approach, only 40% of these respondents were categorized as such as determined by the scale score classifications.

Summary of Question 2

The results of the teachers' self-identified instructional approach to the teaching of writing skills for the essay component and their computed scores on the product and process scales were reported in this section. The scale scores were then used to make determinations of respondents' group membership. The results of the scale score determinations for the combination approach classification were compared to the results of the respondents' self-identified combination approach classification. While nearly 80% of the teachers in both Group R and Sub-group T identified themselves as using a combination approach, only 31% in Group R and 40% in Sub-group T were classified as such by scale score determinations.

Question 3

What is the relationship between selected teacher demographics and the instructional approach of the GED teachers as defined by the scale scores?

The stepwise multiple regression analysis method was used to study this relationship for both Group R and Sub-group T with the teacher demographics as the independent variable and the instructional approach as the dependent variable.

For Group R, the stepwise multiple regression analysis of product scale scores on teacher demographics resulted in five steps. The variable of race was entered into the regression equation on step one. The coefficient of determination for the variable of race was .099;

therefore, approximately 10% of the explained variance of the product scale scores was determined by this variable. On step two, the variable of gender was entered into the equation. The addition of gender contributed approximately 8.5% more of the explained variance. On step three, the variable of weeks per year teaching GED coursework was added which contributed another 10% to the explained variance. The variable of hours per week teaching GED coursework was entered on step four and it added another 5% to the explained variance, while the variable of years as a GED instructor entered on the fifth step contributed an additional 3% to the explained variance. As shown in Table 4.4, in combination, the five variables entered into the multiple

Table 4.4

Summary of the Multiple Regression of Product Scale Scores on Teacher Demographics for Group R (N=100)

Step/Variable	r	R	R^2	$R^2 \Delta$	F	p
1. Race	.32	.316	.099	.099	10.88	.001*
2. Gender	-.31	.429	.185	.085	10.99	.001*
3. Weeks Per Year Teaching GED Coursework (WKS GED)	-.26	.535	.286	.101	12.81	.001*
4. Hours Per Week Teaching GED Coursework (HRS GED)	-.24	.581	.338	.052	12.12	.001*
5. Years as GED Instructor (YEARS)	-.10	.609	.371	.033	11.09	.001*

The regression equation is as follows:

Product Scale Scores = 26.84 + .35 (Race) - .38 (Gender) - .26 (WKS GED) - .25 (HRS GED) - .19 (YEARS)

*p<.05

regression equation determined approximately 37% of the explained variance of the product scale scores.

The stepwise multiple regression analysis for Group R of process scale scores on teacher demographics was conducted in a similar manner. This resulted in two steps with the variable of gender being entered on the first step and the variable of type of training in teaching writing to adults being entered on the second step. The variable of gender accounted for approximately 5.3% of the explained variance of the process scale scores. The addition of the variable of type of training in teaching writing to adults contributed another 4.6% more of the explained variance. As indicated in Table 4.5, together these two variables determined approximately 10% of the explained variance of the process scale scores for Group R.

Table 4.5

Summary of the Multiple Regression of Process Scale Scores on Teacher Demographics for Group R (N=93)

Step/Variable	r	R	R^2	$R^2\Delta$	F	p
1. Gender	.23	.231	.053	.053	5.12	.026*
2. Type of Training in Teaching Writing to Adults (ADDUM)	.20	.315	.099	.046	4.95	.009*

The regression equation is as follows:

Process Scale Scores = 24.29 + .24 (Gender) + .21 (ADDUM)

*$p<.05$

The stepwise multiple regression analyses of product and process scale scores on teacher demographics was also performed for Sub-group T. However, due to the disproportionate number of respondents, the variable of gender could not be used in the analyses. The multiple regression of product scale scores on teacher demographics (N=26) resulted only in the variable of hours per week teaching writing skills for the essay component being entered into the equation and accounting for approximately 25% of the explained variance of the product scale scores (Table 4.6). No variables were entered into the regression equation for process scale scores on teacher demographics (N=25).

Table 4.6

Summary of the Multiple Regression of Product Scale Scores on Teacher Demographics for Sub-group T (N=26)

Step/Variable	r	R	R^2	$R^2\Delta$	F	p
1. Hours Per Week Teaching Writing Skills for Essay Component (HRS ESS)	-.50	.499	.249	.249	7.94	.010*

The regression equation is as follows:

Product Scale Scores = 20.16 - .50 (HRS ESS)

*$p < .05$

<u>Summary of Question 3</u>

The results of the stepwise multiple regression analysis of product and process scale scores on teacher demographics for Group R and Sub-group T were presented in this section. For Group R, five demographic variables were entered into the regression equation with product scale scores and accounted for approximately 37% of the explained variance. Two demographic variables were entered into the equation with process scale scores and accounted for approximately 10% of the explained variance. For Sub-group T, one demographic variable was entered into the regression equation with product scale scores and accounted for about 25% of the explained variance; no demographic variables were entered into the equation with process scale scores.

<div align="center">Question 4</div>

What is the relationship between selected teacher demographics and student performance on the essay component?

For the purpose of addressing this research question, the sub-group of GED teachers who identified their students who were first-time GED test takers in December 1990 (Sub-group T) was employed. These 30 GED teachers identified 113 students; however, only 98 of the students actually took the test in December 1990. Most, but not all, of the teachers identified more than one student.

For each of the identified students, a holistic essay score was determined by official scorers of the GED Testing Service. Each essay was read through rapidly by two scorers who assigned to it a score from a low of one to a high of six. Since no scores assigned to any individual essay differed by more than one point, no third reader was

needed for scoring purposes for this group of essays and the two rater scores were added to obtain a student essay test score. Each teacher, then, had a student essay test score that represented the performance of the teacher's student(s). As demonstrated in Table 4.7, an average combined student essay score was determined for each of the GED teachers by taking the mean across their identified student(s). This resulted in a range of average combined student essay test scores from a low of five to a high of eight with a mean score of 6.47.

Table 4.7

Distribution of Averaged Essay Test Scores for Sub-group T

Averaged Essay Test Score	GED Teacher N	%
5.00	2	6.7
5.80	1	3.3
6.00	8	26.7
6.14	1	3.3
6.25	1	3.3
6.40	1	3.3
6.50	3	10.0
6.67	2	6.7
6.75	1	3.3
6.80	1	3.3
7.00	7	23.4
8.00	2	6.7
Total	30	100.0

To examine the relationship between selected teacher demographics and student performance on the essay component for Sub-group T, the stepwise multiple regression analysis method was used with teacher demographics as the independent variables and student performance on the essay component (averaged essay test scores) as the dependent variable. Due to the disproportionate number of respondents comprising the samples, the variable of gender could not be used in the analysis. The multiple regression of averaged essay test scores on teacher demographics resulted only in the variable of years as a GED instructor being entered into the regression equation and accounting for approximately 19% of the explained variance of the students' averaged essay test scores (Table 4.8).

Table 4.8

Summary of the Multiple Regression of Averaged Essay Test Scores on Teacher Demographics (N=29)

Step/Variable	r	R	R^2	$R^2\Delta$	F	p
1. Years as a GED Instructor (YEARS)	.44	.437	.191	.191	6.370	.018*

The regression equation is as follows:

Averaged Essay Test Scores = 6.08 + .44 (YEARS)

*$p < .05$

Summary of Question 4

The results of the stepwise multiple regression analysis of student averaged essay test scores on teacher demographics was presented in this section. Only the variable of years as a GED instructor was entered into the regression equation and it determined approximately 19% of the explained variance of the student score on the essay component.

Question 5

What is the relationship between student performance on the essay component and GED teacher instructional approach as defined by the scale scores?

Sub-group T, GED teachers who identified students who were first-time test takers in December 1990, was employed for addressing this research question. As before, the averaged combined student essay test score was determined for each of the GED teachers in Sub-group T.

The averaged essay test scores of the teachers' students were analyzed with a one-way ANOVA with the averaged essay test score as the dependent variable and the product scale scores (hi vs. lo) as the independent variable. No statistically significant differences were found to exist between the students' averaged essay test scores of teachers who scored high or low on the product scale ($p > .05$). An examination of the means resulting from this ANOVA procedure indicated that for teachers who scored high on the product scale, students averaged 6.43 on the essay component and for teachers who scored low on the product scale, students averaged 6.45 on the essay component.

A one-way ANOVA with the averaged student essay test score as the dependent variable and the process scale scores (hi vs. lo) as the independent variable was computed. No statistically significant differences were found to exist between the students' averaged essay test scores of teachers who scored high or low on the process scale ($p>.05$). For teachers who scored high on the process scale, students averaged 6.55 on the essay component, while for teachers who scored low on the process scale, students averaged 6.22 on the essay component.

Summary of Question 5

The results of the ANOVA procedures on student essay scores by GED teacher instructional approach for Sub-group T are presented in this section. The results indicated that there were no statistically significant differences between teachers who scored high or low on the product or process scales (instructional approach), in terms of their students' averaged essay test scores ($p>.05$).

Question 6

What are the perceptions of the GED teachers toward inservice training for the essay component?

For the purpose of addressing this research question Group R was utilized, because it was not necessary to have data solely from teachers who had identified students who took the GED test for the first time in December 1990.

The GED teachers were asked to select one answer from among five possible Likert-type scale choices that most nearly approximated their extent of agreement with each of the 16 research statements. This section presents each of the research statements and the most

important percentages of response. Individual percentages and corresponding respondent numbers for each anchor on the Likert-type scale choices for each research statement are found in Table 4.9.

1. Sixty-nine percent of the respondents agree or strongly agree that the addition of the essay component to the Writing Skills Test necessitates the development of a state-sponsored inservice training program to assist GED instructors to acquire the appropriate techniques, methods, and strategies to teach writing.

2. Ninety-two percent of the respondents agree or strongly agree that any inservice training program developed for GED teachers who teach writing skills for the essay component should include an assessment of the teachers' needs.

3. Seventy-five percent of the respondents agree or strongly agree that GED teachers who teach writing skills for the essay component should be the primary source of ideas for the improvement of their inservice training.

4. Eighty-four percent of the respondents agree or strongly agree that inservice training for GED instructors who teach writing skills for the essay component is important for professional growth.

5. Although 48% of the respondents agree or strongly agree, 35% of the respondents disagree or strongly disagree that the optimal time to offer inservice training for the essay component is during the summer.

6. Seventy-seven percent of the respondents agree or strongly agree that all GED instructors who teach writing skills for the essay component should receive some inservice training to address this new test addition.

Table 4.9

Distribution of Respondents in Group R by Inservice Statements

Inservice Statement	SD % (n)	D % (n)	DK % (n)	A % (n)	SA % (n)
1. The addition of the essay component to the Writing Skills Test necessitates the development of a state-sponsored inservice training program to assist GED instructors to acquire the appropriate techniques, methods, and strategies to teach writing.	4.5 (5)	14.4 (16)	12.6 (14)	48.7 (54)	19.8 (22)
2. Any inservice training program developed for GED teachers who teach writing skills for the essay component should include an assessment of these teachers' needs.	.9 (1)	4.5 (5)	2.7 (3)	74.0 (83)	17.9 (20)
3. The GED teachers who teach writing skills for the essay component should be the primary source of ideas for the improvement of their inservice training.	.9 (1)	11.7 (13)	12.6 (14)	62.2 (69)	12.6 (14)
4. Inservice training for GED instructors who teach writing skills for the essay component is important for professional growth.	1.8 (2)	5.4 (6)	9.0 (10)	63.1 (70)	20.7 (23)
5. The optional time to offer inservice training for the essay component is during the summer.	9.1 (10)	25.4 (28)	17.3 (19)	39.1 (43)	9.1 (10)
6. All GED teachers who teach writing skills for the essay component should receive some inservice training to address this new test addition.	2.7 (3)	9.8 (11)	10.7 (12)	59.8 (67)	17.0 (19)

Table 4.9 (continued)

Distribution of Respondents in Group R by Inservice Statements

Inservice Statement	SD % (n)	D % (n)	DK % (n)	A % (n)	SA % (n)
7. Curriculum content for inservice training programs for the essay component of the Writing Skills Test should primarily be the responsibility of experts in writing.	8.1 (9)	45.1 (50)	23.4 (26)	20.7 (23)	2.7 (3)
8. Principles of adult learning and development should be incorporated into any inservice program for GED instructors who teach writing skills for the essay component.	.9 (1)	4.4 (5)	3.6 (4)	65.2 (73	25.9 (29)
9. The inservice training that addresses the essay component should attempt to increase the research knowledge base of the teacher participants.	3.6 (4)	15.3 (17)	26.1 (29)	49.6 (55)	5.4 (6)
10. Inservice training for the essay component should be designed to change teacher behaviors before attempting to change teacher attitudes.	12.8 (14)	40.4 (44)	34.9 (38)	10.1 (11)	1.8 (2)
11. GED instructors should receive tangible rewards or incentives for participating in inservice training for the essay component of the Writing Skills Test.	1.8 (2)	15.5 (17)	9.1 (10)	50.9 (56)	22.7 (25)

Table 4.9 (continued)

Distribution of Respondents in Group R by Inservice Statements

Inservice Statement	SD % (n)	D % (n)	DK % (n)	A % (n)	SA % (n)
12. Inservice training for the essay component should be designed to address only the short-term needs of GED instructors.	7.3 (8)	60.0 (66)	16.4 (18)	14.5 (16)	1.8 (2)
13. Inservice training for the essay component should be spaced over time rather than administered in a "one-shot" intensive session.	3.6 (4)	23.4 (26)	18.9 (21)	46.9 (52)	7.2 (8)
14. Inservice training for the essay component should be designed primarily to help the GED teacher "teach to the test."	10.3 (11)	47.7 (51)	15.9 (17)	22.4 (24)	3.7 (4)
15. Inservice training for the essay component should rely on lecture as the primary delivery mode.	23.4 (26)	56.8 (63)	9.9 (11)	9.9 (11)	0.0 (0)
16. All inservice training activities for the essay component should have specified objectives.	0.0 (0)	1.8 (2)	8.1 (9)	65.8 (73)	24.3 (27)

7. Fifty-three percent of the respondents disagree or strongly disagree that curriculum content for inservice training programs for the essay component of the Writing Skills Test should primarily be the responsibility of experts in writing.

8. Ninety-one percent of the respondents agree or strongly agree that principles of adult learning and development should be incorporated into any inservice program for GED instructors who teach writing skills for the essay component.

9. While 55% of the respondents agree or strongly agree, 26% of the respondents indicate that they do not know if the inservice training that addresses the essay component should attempt to increase the research knowledge base of the teacher participants.

10. Although 53% of the respondents disagree or strongly disagree, 35% of the respondents indicate that they do not know if inservice training for the essay component should be designed to change teacher behaviors before attempting to change teacher attitudes.

11. Seventy-four percent of the respondents agree or strongly agree that GED instructors should receive tangible rewards or incentives for participating in inservice training for the essay component of the Writing Skills Test.

12. Sixty-seven percent of the respondents disagree or strongly disagree that inservice training for the essay component should be designed to address only the short-term needs of GED instructors.

13. Fifty-four percent of the respondents agree or strongly agree that inservice training for the essay component should be

spaced over time rather than administered in a "one-shot" intensive session.

14. While 58% of the respondents disagree or strongly disagree, 26% of the respondents agree or strongly agree that inservice training for the essay component should be designed primarily to help the GED teacher "teach to the test."

15. Eighty percent of the respondents disagree or strongly disagree that inservice training for the essay component should rely on lecture as the primary delivery mode.

16. Ninety percent of the respondents agree or strongly agree that all inservice training activities for the essay component should have specified objectives.

Summary of Question 6

The results of the GED teachers' perceptions toward inservice training for the essay component were presented in this section. Their responses indicated that the teachers had relatively strong opinions about the statements and that they generally agreed with the literature on inservice training as applied to the essay component.

Question 7

What are the perceptions of the GED teachers toward an awareness and use of adult learning theory/principles in the GED classroom?

Again, Group R was employed to address this research question and the teachers were asked to select one answer from among five Likert-type scale choices that most nearly approximated their extent of agreement with each of the 15 research statements. This section presents each of the research statements and the most important

percentages of response. Individual percentages and corresponding respondent numbers for each answer on the Likert-type scale choices for each research statement are found in Table 4.10.

1. Ninety-one percent of the respondents agree or strongly agree that, in general, they believe that they have a good understanding of the basic principles of adult education theory/practice.

2. One hundred percent of the respondents agree or strongly agree that adults exhibit a variety of learning styles.

3. While 51% of the respondents disagree or strongly disagree, 35% of the respondents agree or strongly agree that an adult cannot learn very much or very well from teaching methods used primarily with children.

4. Ninety-three percent of the respondents disagree or strongly disagree that as GED instructors, they are providers of knowledge rather than facilitators of learning.

5. Eighty-four percent of the respondents agree or strongly agree that adult learning must have personal and immediate application for the GED student.

6. While 55% of the respondents disagree or strongly disagree, 34% of the respondents agree or strongly agree that most adult students are resistant to change.

7. Eighty-nine percent of the respondents agree or strongly agree that adults can benefit greatly from peer learning.

8. Ninety-eight percent of the respondents disagree or strongly disagree that the life experiences of adults have little application to learning new material.

Table 4.10

Distribution of Respondents in Group R by Adult Education Theory Statements

Adult Education Theory Statements	SD % (n)	D % (n)	DK % (n)	A % (n)	SA % (n)
1. In general, I believe that I have a good understanding of the basic principles of adult education theory/practice.	0.0 (0)	3.6 (4)	5.3 (6)	74.3 (84)	16.8 (19)
2. Adults exhibit a variety of learning styles.	0.0 (0)	0.0 (0)	0.0 (0)	45.1 (51)	54.9 (62)
3. An adult cannot learn very much or very well from teaching methods used primarily with children.	5.5 (6)	45.9 (50)	13.8 (15)	27.5 (30)	7.3 (8)
4. As a GED instructor, I am a provider of knowledge rather than a facilitator of learning.	35.4 (40)	57.5 (65)	0.9 (1)	5.3 (6)	0.9 (1)
5. Adult learning must have personal and immediate application for the GED student.	0.9 (1)	12.5 (14)	2.7 (3)	61.6 (69)	22.3 (25)
6. Most adult students are resistant to change.	6.3 (7)	49.1 (55)	10.7 (12)	33.0 (37)	0.9 (1)
7. Adults can benefit greatly from peer learning.	1.8 (2)	2.6 (3)	7.1 (8)	60.2 (68)	28.3 (32)
8. The life experiences of adults have little application to learning new material.	56.6 (64)	41.6 (47)	0.0 (0)	1.8 (2)	0.0 (0)
9. Adults may attempt to hide their undereducation by employing defense mechanisms.	0.0 (0)	4.4 (5)	0.9 (1)	55.8 (63)	38.9 (44)

Table 4.10 (continued)

Distribution of Respondents in Group R by Adult Education Theory Statements

Adult Education Theory Statements	SD % (n)	D % (n)	DK % (n)	A % (n)	SA % (n)
10. As a GED instructor, I should never admit to my students that I do not know an answer.	67.3 (76)	32.7 (37)	0.0 (0)	0.0 (0)	0.0 (0)
11. I make a genuine effort to listen to my students' personal problems.	2.7 (3)	2.7 (3)	1.8 (2)	61.9 (70)	30.9 (35)
12. My GED classroom environment provides both physical and psychological comfort and support for the learner.	0.0 (0)	0.9 (1)	7.2 (8)	47.3 (53)	44.6 (50)
13. I exhibit a sense of humor in the classroom as a GED instructor.	0.0 (0)	0.0 (0)	0.0 (0)	44.6 (50)	55.4 (62)
14. GED students have often had unpleasant past experiences with school and may exhibit a genuine fear of the school setting.	0.9 (1)	2.6 (3)	1.8 (2)	39.8 (45)	54.9 (62)
15. The adult's motivation for learning is often more intrinsic than extrinsic.	0.9 (1)	11.1 (12)	13.0 (14)	54.6 (59)	20.4 (22)

9. Ninety-five percent of the respondents agree or strongly agree that adults may attempt to hide their undereducation by employing defense mechanisms.

10. One hundred percent of the respondents disagree or strongly disagree that as GED instructors, they should never admit to their students that they do not know an answer.

11. Ninety-three percent of the respondents agree or strongly agree that they make a genuine effort to listen to their students' personal problems.

12. Ninety-two percent of the respondents agree or strongly agree that their GED classroom environment provides both physical and psychological comfort and support for the learner.

13. One hundred percent of the respondents agree or strongly agree that they exhibit a sense of humor in the classroom as a GED instructor.

14. Ninety-five percent of the respondents agree or strongly agree that GED students have often had unpleasant past experiences with school and may exhibit a genuine fear of the school setting.

15. Seventy-five percent of the respondents agree or strongly agree that the adult's motivation for learning is often more intrinsic than extrinsic.

Summary of Question 7

The results of the GED teachers' perceptions toward an awareness and use of adult learning theory/principles in the GED classroom were presented in this section. The responses indicated that these teachers have a good understanding of some of the

theory/principles of adult education and that they appear to employ some of these principles in their classrooms.

Chapter Summary

The results of the statistical analyses of the data for this study were reported in this chapter. The analyses indicated that Group R and Sub-group T shared many similar demographic characteristics and except for the variables of years as a GED teacher and hours per week teaching GED coursework, Sub-group T and teachers within Group R who did not identify students were essentially equivalent in terms of their demographic characteristics. Scale score determinations indicated that less than one-third of the teachers in Group R and approximately one-half of those in Sub-group T who had identified themselves as using a combination approach were classified as such by scale scores. Also, scale score classifications indicated that Group R was more product-oriented and Sub-group T more combination approach-oriented to teaching writing skills for the essay component.

The regression of product scale scores on teacher demographics for Group R resulted in five demographic variables being entered into the equation and accounting for approximately 37% of the explained variance while for Sub-group T only one demographic variable was entered which determined about 25% of the explained variance. The regression of process scale scores on teacher demographics for Group R resulted in two demographic variables being entered into the equation and accounting for about 10% of the explained variance while no demographic variables were entered for Sub-group T.

For the regression of students' averaged essay test scores on teacher demographics (utilizing Sub-group T) 19% of the variance was explained by the solely entered variable of years as a GED teacher.

ANOVA procedures indicated no statistically significant differences between teachers in Sub-group T who scored high or low on the product or process scales in terms of their students' averaged essay test scores.

The perceptions of the teachers toward inservice training for the essay component indicated that overall they had relatively strong opinions about the purpose, design, and content of the training and their responses were generally consistent with the literature on inservice training.

The perceptions of the teachers toward an awareness and use of adult education theory/principles seemed to indicate that they had a relatively good awareness of the principles of adult education as set forth in much of the literature and that these principles were generally being implemented in their classrooms.

CHAPTER V

Conclusions and Recommendations

Introduction

The conclusions and discussion related to the analysis of the data for this study and the recommendations for future research are presented in this chapter.

The purpose of the study was to determine the demographic characteristics, instructional approach, perceptions toward inservice training, and awareness and use of adult education theory/principles of public-school affiliated GED instructors in Virginia who teach writing skills for the essay component of the GED Writing Skills Test. An additional purpose of the study was to compare student performance on a sample of GED essays to determine the relationship of student performance with teacher demographic characteristics and teacher instructional approach as identified by the process and product scale scores.

It is believed that the results of this study may serve as a touchstone to aid in the development of a stronger foundation for future inservice training of GED instructors in the Commonwealth of Virginia who teach writing skills for the essay component of the Writing Skills Test.

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The seven research questions for this study are used as the organizational framework to present the conclusions and discussion in this section.

Conclusions and Discussion

Question 1

What are the demographic characteristics of: (a) the respondents from the defined population of GED instructors in Virginia who teach writing skills for the essay component of the Writing Skills Test (Group R), (b) the sub-group of teachers who identified students who were first-time test takers of the GED Test in December 1990 (Sub-group T); and (c) do these teachers differ significantly in terms of their demographic characteristics?

Since the resultant demographic profile of the respondents in this study indicated that Group R and Sub-group T shared many similar demographic characteristics, it was concluded that a meaningful way to view the teacher demographic data was to develop a composite profile of a representative teacher in this study. The profile indicated that this teacher would be a white female, 41-50 years of age, with a Master's degree in Education, employed part-time by a county school division to teach GED, and teaching other subject areas full-time in a senior high school. Furthermore, this GED teacher would have two to five years of experience teaching GED coursework, would teach GED coursework 31-40 weeks per year, would teach less than five hours of GED coursework per week, would teach less than two hours per week for the essay component, and would not belong to any adult education professional organization. Furthermore, the teacher would have received training in teaching writing to adults and

in adult education theory/principles by attending workshops; however, the teacher probably would not have received training in teaching writing skills for the essay component of the GED Test.

The fact that the respondents in Sub-group T (teachers who identified students) and the respondents who did not identify students have essentially the same demographic characteristics was not surprising, since Sub-group T was a sub-group of Group R and the only criterion that differentiated a member of Sub-group T from other members of Group R was that the teacher identified students for purposes of later statistical analysis in the study. The members of Sub-group T were essentially self-selected. If all respondents in Group R had identified students, there would have been no need to have a sub-group. It is interesting to note, however, that even though Sub-group T was self-selected and not randomly divided by the researcher in any way, the frequencies and percentages within Sub-group T associated with each of the demographic variables were essentially proportionately equal to the frequencies and percentages within Group R associated with the same demographic variable.

Although teachers who identified students and teachers who did not identify students were essentially equivalent in terms of most of their demographic characteristics, statistically significant differences did emerge between these two groups for the two continuous demographic variables of years as a GED instructor and hours per week teaching GED coursework. Even though these differences were not anticipated, several explanations may account for these findings. Because the analyses indicated that teachers who identified students had significantly more years of experience as GED teachers and also

spent a significantly greater number of hours per week teaching GED coursework, it is possible that their decision to identify students was related to the issue of trust. That is to say, because teachers who identified students had been associated with GED programs significantly longer than teachers who did not identify students, it may be that teachers who identified students were more inclined to trust in the integrity of the project, because it had received support from the Office of Adult Education of the Virginia Department of Education and because support had been requested and received from teachers' local GED administrators. Also, because teachers who identified students spent significantly more hours per week teaching GED coursework, it may be accurate to believe that this additional time spent with the students resulted in a stronger bond of mutual trust, respect, and rapport than achieved by teachers who did not identify students. To some degree, the stronger bond established by teachers with their students may have influenced teachers' decisions to identify their students.

The decision of teachers who had significantly more years of experience teaching GED and who spent significantly more hours per week teaching GED coursework to identify their students may be somewhat related to their belief in supporting the need for research within the GED field. Some of the data from this study appear to point in that direction. Within the group of 30 GED teachers who identified students, there were 24 (80%) who indicated on the survey questionnaire that they would like to receive the results of this study; 1 (3.3%) indicated that he/she did not want the results; and, 5 (16.7%) did not indicate a choice. Within the group of 83 GED

teachers who did not identify students, 61 (73.4%) indicated that they wanted the results; 11 (13.3%) indicated that they did not want the results; and 11 (13.3%) did not indicate a choice. A comparison of the percentages related to the responses for each group indicates similar response rates between the groups for those teachers who want to get results of the study and for those who did not indicate a choice. However, teachers who identified students indicated to a much lesser degree that they did not want the results of the study than teachers who did not identify students.

Although the issues of trust and support for the need for GED research may be partial explanations for the significant findings, two other explanations may also have some bearing on the results. First, because teachers who identified students taught significantly more hours of GED coursework each week, they may have taught a greater number of students than teachers who did not identify students and, thus, there may have been a greater possibility that they would have students taking the GED test for the first time in December 1990. And second, it may be that teachers who identified students, to some extent, were more confident about preparing their students for the test and/or about their students' abilities.

In summary, then, it was concluded that: (1) a meaningful way to view the teacher demographic data was to develop a composite profile of a representative teacher in this study; (2) the teachers who identified students and the teachers who did not identify students had essentially the same demographic characteristics; and, (3) teachers who identified students may have done so because of issues of trust associated with the integrity of the project, because of a belief in

supporting the need for research in the GED field, because of the possibility that they may have had the opportunity to teach more students which could have resulted in having more students who were eligible as first-time test takers in December 1990, and because these teachers may be more confident in either their own abilities as GED instructors or in their students' readiness to take the GED test.

Question 2

(a) What instructional approach to the teaching of writing for the essay component did these GED teachers identify themselves as using; and, (b) how did these GED teachers score on the product and process scales?

Overwhelmingly, the respondents in both Group R and Sub-group T indicated that they used a combination of the product and process approaches to teach writing skills for the essay component; the percentage of respondents that reported that they used the combination approach for Group R was 79.6% and for Sub-group T was 80%. As determined by the scale score group membership classifications, however, a substantial discrepancy was shown to exist between the proportion of teachers in both Group R and Sub-group T who identified themselves as using a combination approach. Far fewer teachers employed a combination approach as determined by the scale score classifications than were self-reported.

Several explanations may account for the high percentage of respondents who identified themselves as using a combination approach. Since over 62% of the respondents indicated that they had received training in the teaching of writing skills to adults, primarily through workshops, it seems reasonable to believe that some of the

training focused on the different approaches to writing instruction. It also seems reasonable to believe that some of the instruction touched on the philosophy undergirding the various approaches and on the characteristics of the approaches. The basis of many of the respondents' self-identified choice of the combination approach as the approach to the teaching of writing skills for the essay component used most in their GED classrooms may have its roots in this training.

For those teachers who did not receive any training in teaching writing skills to adults but also chose the combination approach, in fact, for all of the respondents who chose the combination approach regardless of whether they had received training or not, their decision may have been the result of a statistical effect akin to what Kerlinger (1973) calls an "error of central tendency" (p. 549). This is the tendency of a respondent to avoid any extreme judgements and opt for a "middle of the road" position. In this forced-choice item selection, the respondents may have avoided the polarized positions of product and process approach and selected the combination approach.

The tendency of the respondents in both Group R and Sub-group T to endorse process statements to a greater extent than product statements may again be primarily based in their training received in the teaching of writing to adults. This stronger endorsement of process statements by the respondents is probably a reflection of the predominance of process literature in the field of writing over the past 20 years or more. Although the teachers were requested to respond to the statements based on their actual classroom practices of teaching writing skills for the essay component, it should not be overlooked that these responses may also incorporate a response

effect. That is to say, to some degree the responses by the teachers may be based on their desire to be perceived as having a good understanding of some of the assumptions, techniques, and methods associated with the process approach to writing.

In order to examine the self-perceptions of respondents in both Group R and Sub-group T who had identified themselves as using a combination approach to teach writing, a comparison was made between the combination group membership of the respondents as self-reported and the combination group membership of the respondents as determined by product and process scale scores. Because there was no scale developed beforehand to measure a teacher's combination approach orientation, it was reasoned that, to some extent, this combination approach inclination could be somewhat identified by examining the proportion of respondents in both Group R and Sub-group T who were identified by the scale scores to employ the product and process approaches at either a high or low level.

The cut-off scores which were used to classify respondents as scoring high or low on the product and process scales were determined to form essentially equal groups of respondents in Group R. It was decided that these same cut-off score criteria would be used for Sub-group T, since changing the scale score designations from Group R to Sub-group T might result in a respondent from Sub-group T classified as high or low on one of the scales being classified differently as part of Group R. No mid-group classification was used for the scale scores, because it was decided that the statistics would

be stronger for Sub-group T if only the two scoring levels were employed.

The comparison of group membership for respondents in Group R and in Sub-group T as defined by the scale score classifications yielded several interesting findings. First, as has been indicated, many teachers in Group R and Sub-group T who had identified themselves as using a combination approach were not classified as such by scale score determined group membership. Second, a greater proportion of respondents in Sub-group T were classified as employing a combination approach in comparison to those in Group R, as determined by scale score group membership. And third, if one looks at the earlier analyses of the respondents' scores on the product and process scales, one would conclude that for both Group R and Sub-group T, scores were higher on the process scale. One might then arguably conclude that the respondents are more process-oriented than product-oriented. However, there is some danger in drawing that conclusion without taking into account some other considerations. In this case, two factors which need to be considered before any conclusions are reached are the number of respondents in Group R and Sub-group T who have both a product score and a process score which can be used for analysis and any significant variability among product and process scale scores which is common to both scales.

Although in Group R, 102 respondents had a product scale score and 95 respondents had a process scale score, when the chi-square analysis for this group was performed to compare product and process group membership designations, only 90 respondents had a score on

each scale which could be used for analysis. Likewise, in Sub-group T, 27 respondents had a product scale score and 26 respondents had a process scale score, but only 25 respondents had a score on each scale which could be used for analysis. These reductions in the number of respondents who had scores on both scales which could be used for group membership analysis certainly affected the proportion of respondents in each group.

Because a significant relationship between product group membership and process group membership was found to exist for Group R (p=.006, r=-.287, r^2=.08), it was determined that approximately 8% of the explained variance of the product scale scores was shared with the process scale scores, and vice versa. For respondents in Group R, high or low membership on one scale is somewhat related to high or low membership on the other scale. Knowing a respondent's membership in one scale determined group, then, allows one to predict with some degree of certainty the respondent's membership in the other scale determined group. The lack of statistical significance between product group membership and process group membership for Sub-group T does not allow one to make this statement of relationship for Sub-group T.

The upshot here, then, is that although respondents tended to endorse process items to a greater extent than product items, when other factors were included, scale score determined group membership indicated that Group R appeared to be more product-oriented in its approach to the teaching of writing skills for the essay component, whereas Sub-group T appeared to be more combination approach-oriented.

To sum up, although nearly 80% of the respondents in both Group R and Sub-group T identified themselves as employing a combination of the product and process approaches to teaching writing skills for the essay component, scale score determinations indicated that these percentages were much less. Possible explanations for why so many teachers identified themselves as using the combination approach include training which emphasizes various approaches to teaching writing and the possibility that respondents may have opted for a middle position between the product and process approaches.

Additionally, it was concluded that Group R appeared to be more product-oriented in its approach to the teaching of writing and Sub-group T appeared to be more combination approach-oriented, as defined by the scale scores. It is suggested that these designations are affected, to some extent, by two factors--the number of respondents in Group R and Sub-group T who have both a product and a process score which can be used for analysis and any significant variability among product and process scale scores which is common to both scales. In this study, that common variance was determined to be approximately 8%.

Question 3

What is the relationship between selected teacher demographics and the instructional approach of the GED teachers as defined by the scale scores?

Multiple regression analyses were used to explore the relationship between the teacher demographics and the scale score classifications for both Group R and Sub-group T. McMillan and

Schumacher (1984) suggest the use of multivariate analyses because employing a series of univariate analyses increases the probability of finding significant differences because of using so many tests. Kerlinger (1973) indicates that multiple regression analysis is appropriate when a researcher has both categorical and continuous variables which he/she wants entered and analyzed together.

The stepwise multiple regression analysis of product scale scores on teacher demographics for Group R indicated significant findings at the .05 alpha level for the five demographic variables of race, gender, weeks per year teaching GED coursework, hours per week teaching GED coursework, and years as a GED instructor. During the stepwise multiple regression procedure, the independent variable which has the highest correlation with the dependent variable is selected first by the computer. After it calculates the regression statistics for that initial relationship, the computer then selects, in order, each independent variable that most explains the variance of the dependent variable (Kerlinger, 1973).

The variable of race, then, because it had the highest correlation with the dependent variable of product scale scores for Group R, was entered into the multiple regression equation on step one. It did not, however, emerge as the best predictor variable. While all of the entered variables together determined approximately 37% of the explained variance of the product scale scores for Group R, the variable of gender appeared to be the best single predictor variable entered into the equation, because it emerged from the regression analysis as the independent variable with the largest beta weight. The variable with the largest beta weight, regardless of whether the beta

weight is positive or negative, must be considered as the best predictor variable (Huck, Cormier, & Bounds, 1974). For this study, then, the variable of gender appeared to be the best predictor variable for the product scale scores for teachers in Group R. As determined in this study, males in Group R tended to score higher on the product scale than did females.

An analysis of the data related to the other four variables in the regression equation indicated that for the variable of race, non-white respondents tended to score higher on the product scale than did white respondents; for the variable of weeks per year teaching GED coursework, those respondents who taught less than 40 weeks of GED coursework per year tended to score higher on the product scale than did respondents who taught more than 40 weeks per year of GED coursework. The results further indicated that those respondents who taught five or fewer hours of GED coursework per week tended to score higher on the product scale than did respondents who taught more than five hours of GED coursework per week. Finally, those teachers who had fewer than five years of experience as GED teachers tended to score higher on the product scale than did those teachers who had five or more years of GED teaching experience.

Although the variable of gender and race emerged as the best predictor variables for Group R, these findings were somewhat surprising. While these variables possibly may be good predictors, it seems more plausible, however, that other factors may be intervening here to effect these results. Because of the great difference in number between females and males and between whites and non-whites in the

study, the possibility of the introduction of bias due to disproportionate sample size cannot be discounted.

The presence of the three other demographic variables in the regression equation for Group R were not as surprising. The resultant inverse relationship between product scale scores and each of these variables (weeks as a GED instructor, hours per week teaching GED coursework, and years as a GED teacher) seems to indicate that for Group R, teachers who were considered as scoring low on the product scale taught significantly more hours per week and weeks per year of GED coursework and had significantly more years of experience as a GED instructor. It seems conceivable that GED teachers who have more experience and spend a greater amount of time in the classroom may approach the writing task from a perspective which de-emphasizes a strictly product approach. This de-emphasis may well be the result of a combination of more training which downplays product approach methodology and more opportunity for transference of training back to the classroom.

The stepwise multiple regression analysis of process scale scores on teacher demographics for Group R resulted in the two variables of gender and type of training in teaching writing to adults being entered into the equation and determining approximately 10% of the explained variance of the process scale scores. As with product scale scores, gender (B=.24) again emerged as the best predictor variable. However, the variable of type of training in teaching writing to adults (B=.21) was very close to gender in terms of the direct correlation with process scale scores and in the amount of explained variance of process scale scores. Both variables indicated a positive

and direct relationship with process scale scores, with females scoring higher on the process scale than males and with respondents in Group R who had taken an academic course or courses in teaching writing to adults scoring higher on the process scale than those respondents who did not have an academic course or courses in teaching writing to adults or who did not have any training in teaching writing to adults.

Once again, it is difficult to explain the variable of gender as the best predictor variable without believing other factors or forces intervened. However, for GED teachers who had an academic course or courses in teaching writing to adults to score higher on the process scale than those who did not have an academic course or courses or who had no training, it may indicate that the coursework stressed the process orientation in its basic underlying philosophy, related literature, and teaching techniques and methodology. This would certainly be consistent with the dominance of the process approach in the field of writing over the past 20 years. It could also be argued that these results may indicate that training which is spaced over a long period of time (such as an academic semester) is more meaningful than training given in short periods of time ("one-shot" inservices or workshops). This is entirely consistent with contemporary staff development literature as advocated by Sparks (1983), Korinek, Schmid, and McAdams (1985), and Hinson, Caldwell, and Landrum (1989).

Just as with Group R, the stepwise multiple regression analysis of product and process scale scores on teacher demographics was performed for Sub-group T. The regression of product scale scores on

teacher demographics for Sub-group T resulted only in the variable of hours per week teaching writing skills for the essay component being entered into the regression equation and determining approximately 25% of the explained variance. The variable of gender may have been expected to appear in the regression equation; however, since there were fewer than five males in Sub-group T who identified students, this variable was not included in the analysis. The results of the regression analysis indicated an inverse relationship between product scale scores and hours per week teaching writing skills for the essay component for Sub-group T. GED teachers who taught writing skills for the essay component two or less hours per week tended to score higher on the product scale than did teachers who taught writing skills for the essay component more than two hours per week. Similar to the findings with Group R, teachers in Sub-group T who spent more hours per week teaching for the writing task tended to score lower on the product scale than did teachers who spent fewer hours per week teaching for the writing task.

The regression of process scale scores on teacher demographics for Sub-group T resulted in no variables being entered into the regression equation and indicated that none of the variance of process scale scores for Sub-group T could be determined by these teacher demographic variables.

In summary, the results of the multiple regression analysis of product scale scores on teacher demographics for Group R indicated that males, non-whites, and respondents who had less than five years GED teaching experience, who taught less than 40 weeks per year of GED coursework and who taught five or fewer hours per week of GED

coursework tended to score higher on the product scale than respondents without these characteristics. The regression of process scale scores on teacher demographics indicated that females and respondents who had received training in teaching writing to adults over a long period of time (academic course) tended to score higher on the process scale than respondents without these characteristics.

For Sub-group T, the regression of product and process scale scores on teacher demographics indicated a significant relationship only for the variable of hours per week teaching writing skills for the essay component with product scale scores. Respondents who taught two or less hours per week for the essay component tended to score higher on the product scale than respondents who taught more than two hours per week for the essay component.

While the data from this study cannot be used to conclude that males are product-oriented and females are process-oriented in their approach to teaching writing skills, it may be used to indicate that further research in this area is warranted. One implication from this data, however, which may be useful for planning inservice training is that teachers appear to move away from a strictly product-orientation toward incorporating more features of a process-orientation as they gain more years of GED teaching experience and as they spend more time with the students. This information may help direct the focus of the training, in relation to the experience level of the GED teachers. If teachers with more experience are more process-oriented, this information may be important to planners as they make decisions about the nature, content, and emphasis of training to address the GED essay component.

Question 4

What is the relationship between selected teacher demographics and student performance on the essay component?

Sub-group T was used to examine the stepwise multiple regression analysis of student combined averaged essay test scores on teacher demographics. Only the variable of years as a GED instructor was entered into the regression equation and it determined approximately 19% of the explained variance of the student score on the essay component. This variable indicated a positive and direct relationship with the dependent variable of student combined averaged essay test scores. It appeared that teachers who taught GED coursework five years or more had students whose combined averaged essay test scores were higher than the combined averaged essay test scores of students whose teachers had taught GED coursework less than five years.

These results perhaps indicate that as GED instructors gain more experience working with adults they become more sensitive to the variety of experiences and backgrounds that are represented by the learners and work to develop learning environments which are increasingly supportive of the GED students. This supportive climate is essential to establish an atmosphere of mutual trust and confidence between the student and instructor.

It was not very surprising that only one of the demographic variables was entered into the regression equation. Although it had been anticipated that if any of the variables showed a significant relationship with the combined averaged student essay test scores it would probably be those related to training received in writing skills

or amount of time spent teaching writing skills, an examination of the correlations of these demographic variables with combined averaged student essay test scores showed only small relationships. Because of the restricted range of test scores, the low correlations were anticipated. Therefore, few, if any, demographic variables were expected to show a significant relationship with the dependent variable.

Question 5

What is the relationship between student performance on the essay component and GED teacher instructional approach as defined by the scale scores?

ANOVA procedures were performed on the averaged combined essay test scores of the teachers' students in order to determine if teachers who scored high or low on the product and process scales had students who performed significantly different on the essay component. The results of the ANOVA analyses indicated that there were no statistically significant differences found to exist between teachers in Sub-group T who scored high or low on the product scale, in terms of the students' averaged essay test scores ($p > .05$). Likewise, no statistically significant differences were found to exist between teachers in Sub-group T who scored high or low on the process scale, in terms of the students' averaged essay test scores ($p > .05$). It was concluded that whether or not a teacher in Sub-group T scored high or low on the product or process scale, it did not significantly affect student performance on the essay component. It should be noted here that there was little variance in the students' averaged essay test

scores, making it harder to detect any significant differences between the teacher groups.

Due to the restricted range of the combined student averaged essay test scores and the low reliability of the scales, it is inconclusive whether any of the approaches to teaching writing skills for the essay component (product, process, or combination) as indicated in this study is any better than any of the other approaches. Although one approach may be more popular in the field of writing at a given time, or one approach may be stressed more in the writing and research literature at any given time, these results may indicate that it may not be the approach to writing which is necessarily important to the success of the student, but something else. Perhaps it is the approach which the teacher takes to the student which is the real basis for successful student performance on the essay component.

Question 6

What are the perceptions of the GED teachers toward inservice training for the essay component?

Because student performance data related to the essay component was not needed to address this research question, discussion here is based on the responses of teachers in Group R. The conclusions and discussion presented in this section are organized around the grouping of specific research statements under three general areas of inservice training: Need for Training (statements 1, 4, 6); Planning of Training (statements 2, 3, 5, 11-13); and, Training Content and Delivery (statements 7-10, 14-16).

Need for Training

As a result of the GED teachers' responses to research statements related to their perceived need for training to address the essay component, the following conclusions were derived: GED teachers who teach writing skills for the essay component should receive some inservice training to address this new test addition; this inservice training is important for professional growth; and, this inservice training should be state sponsored.

These teachers believe that the challenges associated with the implementation of the new Writing Skills Test necessitate inservice training to help improve both student writing ability and instructor teaching strategies. Furthermore, their responses may be a reflection of a rising belief among adult educators that state and national governmental entities need to develop a policy of commitment and support for quality inservice training for adult educators. State and national financial support is often viewed as an indicator that these governmental agencies perceive and understand the need for adult education programs. Also, the teachers' responses may be an expression of the frustration many adult educators have voiced about a lack of preparedness they have to teach writing skills and about the lack of financial means in many local areas to provide inservice training to help acquire needed skills.

Planning of Training

From the GED teachers' responses to research statements related to their perceptions of planning the inservice training to address the essay component, it was concluded that: the inservice should be conducted during the summer; the program should include

an assessment of the GED teachers' needs; the GED instructors should receive tangible rewards or incentives for participation; the training should address both long and short-term needs of GED instructors; the training should be spaced over time; and, the GED teachers should be the primary source of ideas for the improvement of their inservice training.

It is clear that these GED writing skills teachers believe that their input into the planning of inservice education which centers on them is essential to maintain the focus and relevance of the training. Furthermore, it is apparent that these teachers are looking for more from their inservice training than a "quick-fix." They want staff development that is ongoing, conducted over time, planned to meet their changing needs and concerns, and designed to provide them with support for their professional growth.

Training Content and Delivery

Based on the GED teachers' responses to research statements related to the area of training content and delivery, the following conclusions were drawn: curriculum content to address the essay component should not be primarily prescribed by experts in writing; the training activities should have specified objectives; the training content should include principles of adult learning; the training content should incorporate a research base; the training content should be designed to first change teacher attitudes about writing before attempting to change teacher behaviors and practices; the training content should not be designed only to help the teacher "teach to the test"; and, lecture should not be the primary delivery mode of the training content.

Because the training content is at the very core of inservice education and staff development, it is important that the training be meaningful, useful, and appropriate for the participants. The teachers must have an opportunity for input into the training content. Quite often, inservice education fails to be effective because it is designed by "experts" who may exhibit a condescending attitude toward the participants or treat them as inferiors. For the teachers to commit to the inservice training, the content must be pertinent; it must contribute to conceptual understanding; it must foster skill development; and, it must enhance transfer back to the classroom.

Question 7

What are the perceptions of the GED teachers toward an awareness and use of adult learning theory/principles in the GED classroom?

The responses from Group R were used to address this research question. The conclusions and discussion presented here are organized around the grouping of specific research statements under two general areas related to adult education theory/principles: Awareness of Theory/Principles (statements 1-3, 5-9, 14-15) and Employing Theory/Principles (statements 4, 10-13).

Awareness of Theory/Principles

As a result of the GED teachers' responses to research statements related to awareness of adult education theory/principles, it was concluded that these teachers believe that: they have a good understanding of the basic principles of adult education; adults exhibit a variety of learning styles; adults can learn from teaching methods used primarily with children; adult learning must have personal and

immediate application; most adult students are not resistant to change; adults benefit from peer learning; adult life experiences are important for learning new material; adults sometimes employ defense mechanisms to hide their lack of education; adults often fear the school setting; and, motivation for learning is often more intrinsic than extrinsic.

The responses of these teachers indicate a sound basic understanding of adult education theory/principles as presented here. They demonstrate that either through formal training via academic coursework, workshops, and inservices, or through professional knowledge about working with adults acquired through other means, perhaps by direct teaching, they are aware of many of the characteristics believed to be common to many adult learners enrolled in ABE and/or GED programs. They understand that each adult student brings a unique personality, ego, and lifestyle to the learning situation and that each learner has his/her own habits, peculiarities, fears, beliefs, and ideas developed over a lifetime. Furthermore, they understand that most adults come to learning situations hoping to get answers to solve an immediate problem. Thus, the learning for these individuals is problem-centered rather than subject-centered. These teachers know that no one philosophy, method, strategy, or technique is appropriate for all adult learners and because of that, they realize that they must be flexible in their approaches to teaching adults and they must be capable of accommodating a variety of adult learning styles.

These teachers are cognizant that their students have a rich background of experiences and that these experiences are vital for any

new learning to occur because all new learning must be related to and built upon these previous experiences. It is dependent upon the nature and meaning of the learners' previous experiences. Teachers can use these individual past experiences to create a learning environment where students have the opportunity to learn from one another. The students should be encouraged to share, discuss, and utilize the knowledge they bring to the learning situation.

Employing Theory/Principles

From responses by the GED teachers to research statements related to their employing adult education theory/principles in their classroom, the following conclusions were drawn: they facilitate learning rather than serving as providers of knowledge; they work to create an atmosphere of honesty, respect, and self-directed learning; they attempt to establish a trusting relationship between teacher and students by indicating interest in the students' personal problems; they attempt to establish a classroom environment which provides both physical and psychological support for the learner; and, they exhibit a sense of humor in the classroom.

The efforts of these GED teachers to employ principles/theory of adult learning in their classrooms reflect the various and often challenging roles in which many of these teachers engage. Unlike in many formal school settings, the role of the adult educator is to be a facilitator of learning and not merely a depositor of information who completely controls the students' learning content. Rather, the adult educator should be a guide to the learning process for the student. It is important that the teacher create an atmosphere of honesty and respect in the classroom. Teachers can go a long way to achieving this

end by simply showing that they are human beings. They can admit to their students when they do not know answers to questions; they can use humor as a learning, teaching, or socializing tool; they can be cognizant not only of the students' academic needs, but also of their non-academic needs; they can be sensitive to the mixture of races, religions, economic backgrounds, political persuasions, cultures, age differences, physical abilities, and background experiences often found in adult learning situations; and, they can be aware of the physical aspects of the learning environment in which the teaching occurs. The result of these kinds of efforts by teachers keep them from exhibiting behaviors that may be perceived by students as offensive, insulting, or biased. When principles of adult learning are appropriately employed in the learning environment, they can be positive factors in establishing trust between teachers and students and may enhance future learning for the students.

Further Discussion

At this point, some final comments based on the study's findings and conclusions may be appropriate. For most of the statistical analyses associated with this study which involved teacher demographic characteristics as either independent or dependent variables, when a significant relationship was found to exist, it usually involved the variable of years as a GED instructor. A significant relationship was shown to exist between more years as a GED instructor and: (1) teachers who identified students, (2) teachers in Group R who scored low on the product scale, and (3) teachers whose students had higher combined averaged essay test scores. Although individual interpretations may differ as to whether, at least two, of

these significant relationships are positive or negative in a GED program, the important thing here is to acknowledge that experience as a GED instructor appears to make a difference. From the results of this study, although not conclusive, the data tend to suggest that there is something positive to be gained for a GED program, for the profession of adult education, and for the students if experienced teachers can be retained in the GED classroom.

Perhaps one of the most interesting findings of the study was the lack of a significant relationship between the instructional approach of the GED teacher and student performance on the essay component. If, as the results of this study indicate, it is inconclusive whether any instructional approach of the GED instructor for teaching writing skills for the essay component as identified in this study is any better than any other approach, then the question arises--what is important for the success of these students on the essay component? Results from other analyses performed for this study may hold, at least, a partial answer. These results seem to indicate that factors like the experience level of GED instructors and the amount of time spent teaching GED coursework may be very important to student success. What is suggested here is that teachers who remain in the GED classroom year after year and who spend more time involved in GED coursework may represent to the students a level of commitment and caring, which in the long run, may be more beneficial to the success of the student than any individual instructional approach as identified in this study.

The GED teachers represented in this study responded strongly and positively about the importance and usefulness of inservice

training to help them gain the skills, methods, and techniques to address the addition of the essay component to the GED Writing Skills Test. They indicated that they wanted to be an integral collaborator in designing all phases of the inservice training process, and they indicated a strong belief that the Commonwealth of Virginia should be a primary financial supporter of the training. Whether or not this desired state support will become an economic reality remains to be seen. However, whether the financial support comes from the state or some other source, these GED teachers want the training.

These GED teachers also indicated that they were cognizant of the theory/principles of adult education and that they understood their role as a facilitator of learning and had an understanding of many of the issues associated with the characteristics and nature of the adult learner. Their responses suggested that they are concerned for their students' personal well-being, learning environment, and academic success.

A final point of discussion that remains is to address the purpose, scope, and usefulness of the study's findings. It is indeed hoped that the results of this study may in some way contribute to the development of better inservice training for Virginia GED teachers who teach writing skills for the essay component of the Writing Skills Test. When considering these findings, it should be considered that the scope of the study was not local but state-wide. As such, the findings are not meant to be representative of any particular GED program and school division included in the study. Furthermore, much like Stafford (1981) suggests about the usefulness of state-wide needs assessment data, the data from this study may be used to

(1) help plan inservice training on a state-wide basis, and/or (2) help suggest areas of focus for inservice training at the local level.

Limitations of Study

Because this study was limited to Virginia public-school affiliated GED teachers who teach writing skills for the essay component of the Writing Skills Test either as part of a GED combination class or as a separate class unto itself, and whose GED program is reimbursed through General Adult Education Funds of the Office of Adult Education of the Virginia Department of Education, the results are not generalizable to other adult education programs or other instructional programs for the GED Test, either within or outside of the state of Virginia. This is a limitation on the study's external validity. Future research may be able to help correct this limitation by including more or all of the GED programs in the state regardless of whether they are public or privately sponsored or funded.

The use of an investigator-designed research instrument was a threat to validity and the use of a Likert-type scale to determine respondent attitudes may have increased the possibility of response-set variance. Future research may help to correct these limitations with the construction of a better research instrument.

The use of only the GED student essay score as a general indicator of student writing ability was a limitation to the study, because, used alone, the essay component has been shown to have low reliability. Future research may help correct this limitation by examining the overall Writing Skills Test score which is comprised of both the essay component and a multiple-choice component.

The moderately low product and process scale score reliabilities may also be a limitation to the results of the study. Future research may help correct this possible limitation, perhaps by increasing the number of items on each scale or by including scale items which further research shows to be more definitive of either a product or process approach.

A final limitation to the study was the lack of research available on teaching writing to adults in preparation for GED testing. Certainly, the recent addition of the essay component to the Writing Skills Test will be a stimulus for more research in that area. Although there is a great deal of research available on teaching writing, on inservice training, on adult learning, and a growing body of research on teaching writing to adults, there is much less research available in these areas when applied to GED Test instruction and preparation. To a great extent, then, decisions made about the direction and approach of this study could not be guided by earlier works.

Recommendations

Based on the study's results and conclusions, the following recommendations are suggested:

1. Another study should be conducted using larger samples and different sampling techniques. The study should be expanded to include all of the public-school affiliated GED programs in the state of Virginia regardless of their funding source. Larger samples would decrease the size of statistical error and make the results more generalizable and useful.

2. A state-wide needs analysis should be conducted which explores what GED teachers need to become more comfortable about

teaching writing skills for the essay component. It is suggested that this needs analysis be administered not only to the teachers, but also to the local GED administrators and to the state-level GED authorities. A comparison of the responses may provide interesting and useful data for developing state and/or local training efforts.

3. Further study should be initiated which examines the classroom practices of teachers who teach writing skills for the essay component. This research would be the basis for the development of a more reliable instrument to measure the product or process orientation of the GED teachers.

4. Because of the perceived important implications associated with the variable of years as a GED instructor, it is recommended that future inservice training programs for teaching writing skills for the essay component should not focus solely on instructional methodology, but should offer a substantial amount of time to what teachers can do to provide a supportive, healthy, nurturing, and mutually respectful environment for the adult learner.

5. Another study should be conducted which uses the composite GED Writing Skills Test score as a general indicator of student writing ability.

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Appendices

APPENDIX A

The Survey Questionnaire

GED PUBLIC SCHOOL TEACHER SURVEY:

A STATEWIDE STUDY OF VIRGINIA PUBLIC SCHOOL GED INSTRUCTORS
WHO TEACH WRITING SKILLS FOR THE ESSAY COMPONENT
OF THE WRITING SKILLS TEST

Rodger L. Doss
224 Spring Drive
Colonial Heights, VA 23834

Section I

Instructions. This section of the survey asks questions about you and your background and experience. Most questions require you to circle the <u>single</u> number that best answers the question. However, a few questions ask you to fill-in-the-blank with the appropriate answer.

<u>Question</u>

1. Do you currently teach writing skills for the essay component of the GED Writing Skills Test?
>>1. YES
>>2. NO

(If you answered "NO" to this question, there is no need for you to continue answering this survey. However, please return the questionnaire in the envelope provided. Thank you for your assistance with this study. If you answered "YES" to this question, please continue with the survey.)

2. What is your gender?
>>1. MALE
>>2. FEMALE

3. What is your race?
>>1. AMERICAN INDIAN
>>2. ASIAN
>>3. BLACK
>>4. HISPANIC
>>5. WHITE
>>6. OTHER (specify) _____

4. What is your age? _____

5. What is your educational background? (Circle one only)
>>1. COMPLETED HIGH SCHOOL
>>2. SOME COLLEGE
>>3. ASSOCIATE'S DEGREE
>>4. BACHELOR'S DEGREE
>>5. SOME GRADUATE COURSES
>>6. MASTER'S DEGREE
>>7. DOCTORATE DEGREE

Question

6. What was your undergraduate major while you attended college?
    1. EDUCATION
    2. ENGLISH
    3. HISTORY
    4. MATHEMATICS
    5. PSYCHOLOGY
    6. SCIENCE
    7. OTHER (specify) _____

7. Do you currently teach within the pubic school system?
    1. YES
    2. NO

8. What grade level do you currently teach?
    1. ELEMENTARY SCHOOL
    2. MIDDLE SCHOOL
    3. SENIOR HIGH SCHOOL

9. How many total years have you been a GED instructor? _____

10. What is your current GED teaching status?
    1. PART-TIME
    2. FULL-TIME

11. How many hours per week do you teach GED coursework? _____

12. How many of those GED coursework hours per week are spent on teaching writing skills for the essay component of the GED Writing Skills Test? _____

13. How many weeks per calendar year (January thru December) do you teach GED coursework? _____

14. Have you ever had any training in the teaching of writing to adults?
    1. YES
    2. NO

15. If your answer to question 14 is "YES," how much and what type of training have you received?

_____

_____

Question

16. Have you ever had any training in the theory and/or principles of adult education?
  1. YES
  2. NO

17. If your answer to question 16 is "YES," how much and what type of training have you received?

_____

_____

18. Have you ever had any training in the teaching of writing skills for the essay component of the GED Writing Skills Test?
  1. YES
  2. NO

19. If your answer to question 18 is "YES," how much and what type of training have you received?

_____

_____

20. Are you a member of any professional organization related to adult education?
  1. YES
  2. NO

Section II

Instructions. This part of the survey is designed to determine if your instructional approach to the teaching of writing for the Writing Skills Test is product-based, process-based, or utilizes a combination of the two. For each statement you will have five possible choices. Please circle the one choice that most nearly approximates your practice. The abbreviations of the choices are as follows:

SD	=	Strongly Disagree
D	=	Disagree
DK	=	Don't Know
A	=	Agree
SA	=	Strongly Agree

Example: (SD) (D) (DK) (A) (SA)

Statement

1. Most of my writing instruction class time is spent working either with students individually or in small groups.

    (SD)   (D)   (DK)   (A)   (SA)

2. The student's final written product is more important than the student's writing process.

    (SD)   (D)   (DK)   (A)   (SA)

3. I often write along with the students on the same writing assignment.

    (SD)   (D)   (DK)   (A)   (SA)

4. Grammar, mechanics, and punctuation must be learned by the students before they can write effective essays.

    (SD)   (D)   (DK)   (A)   (SA)

5. I emphasize to my students that they should move freely back and forth and in and out among the prewriting, writing, and revising stages of writing.

    (SD)   (D)   (DK)   (A)   (SA)

6. I encourage or require a formal outline to precede each written essay.

    (SD)   (D)   (DK)   (A)   (SA)

7. Evaluation of a student's essay should occur while it is being composed as well as after it is composed.

    (SD)   (D)   (DK)   (A)   (SA)

8. As the teacher, I am the only person who grades a piece of student writing.

    (SD)   (D)   (DK)   (A)   (SA)

9. I find that conferencing with the student is most effective while writing is being composed rather than after it is completed.

    (SD)   (D)   (DK)   (A)   (SA)

10. My method of teaching writing is primarily based on a set of rigid and inflexible writing rules.

    (SD)   (D)   (DK)   (A)   (SA)

<u>Statement</u>

11. The correcting of student errors is done within the context of the student's own ideas and language.

     (SD)   (D)   (DK)   (A)   (SA)

12. I rarely include student experiences as a basis for topics when students are to write an essay.

     (SD)   (D)   (DK)   (A)   (SA)

13. My instructional emphasis is more on <u>how</u> students compose rather than on <u>what</u> students compose.

     (SD)   (D)   (DK)   (A)   (SA)

14. I teach writing primarily by laying down a set of rules to be mastered by the student.

     (SD)   (D)   (DK)   (A)   (SA)

15. I approach the teaching of writing as primarily a complex cognitive task.

     (SD)   (D)   (DK)   (A)   (SA)

16. I assign more importance to the student's final written composition than to the student's process of composing.

     (SD)   (D)   (DK)   (A)   (SA)

17. The approach to the teaching of writing skills for the essay component of the Writing Skills Test which I use in my GED classroom may most closely be described as: (<u>Circle</u> only <u>one</u> answer)

    1. One which centers on the developmental aspects of writing with a focus on the whole piece of writing: *process approach.*

    2. One which centers on teaching writing rules and principles with a focus on a series of steps designed to master writing's component parts: *product approach.*

    3. One which utilizes a combination of both of the above approaches.

    4. None of the above approaches.

Section III

Instructions. This part of the survey is designed to determine your perceptions toward the inservice training of teachers for the essay component of the Writing Skills Test. For each statement you will have five possible choices. Please <u>circle</u> the <u>one</u> choice that most nearly approximates your extent of agreement with the statement.

SD = Strongly Disagree
D   = Disagree
DK = Don't Know
A   = Agree
SA = Strongly Agree

Example: (SD) (D) (DK) (A) (SA)

<u>Statement</u>

1. The addition of the essay component to the Writing Skills Test necessitates the development of a state-sponsored inservice training program to assist GED instructors to acquire the appropriate techniques, methods, and strategies to teach writing.

   (SD)   (D)   (DK)   (A)   (SA)

2. Any inservice training program developed for GED teachers who teach writing skills for the essay component should include an assessment of these teachers' needs.

   (SD)   (D)   (DK)   (A)   (SA)

3. The GED teachers who teach writing skills for the essay component should be the primary source of ideas for the improvement of their inservice training.

   (SD)   (D)   (DK)   (A)   (SA)

4. Inservice training for GED instructors who teach writing skills for the essay component is important for professional growth.

   (SD)   (D)   (DK)   (A)   (SA)

5. The optimal time to offer inservice training for the essay component is during the summer.

   (SD)   (D)   (DK)   (A)   (SA)

Statement

6. All GED teachers who teach writing skills for the essay component should receive some inservice training to address this new test addition.

(SD)   (D)   (DK)   (A)   (SA)

7. Curriculum content for inservice training programs for the essay component of the Writing Skills Test should primarily be the responsibility of experts in writing.

(SD)   (D)   (DK)   (A)   (SA)

8. Principles of adult learning and development should be incorporated into any inservice program for GED instructors who teach writing skills for the essay component.

(SD)   (D)   (DK)   (A)   (SA)

9. The inservice training that addresses the essay component should attempt to increase the research knowledge base of the teacher participants.

(SD)   (D)   (DK)   (A)   (SA)

10. Inservice training for the essay component should be designed to change teacher behaviors before attempting to change teacher attitudes.

(SD)   (D)   (DK)   (A)   (SA)

11. GED instructors should receive tangible rewards or incentives for participating in inservice training for the essay component of the Writing Skills Test.

(SD)   (D)   (DK)   (A)   (SA)

12. Inservice training for the essay component should be designed to address only the short-term needs of GED instructors.

(SD)   (D)   (DK)   (A)   (SA)

13. Inservice training for the essay component should be spaced over time rather than administered in a "one-shot" intensive session.

(SD)   (D)   (DK)   (A)   (SA)

14. Inservice training for the essay component should be designed primarily to help the GED teacher "teach to the test."

(SD)   (D)   (DK)   (A)   (SA)

<u>Statement</u>

15. Inservice training for the essay component should rely on lecture as the primary delivery mode.

      (SD)   (D)   (DK)   (A)   (SA)

16. All inservice training activities for the essay component should have specified objectives.

      (SD)   (D)   (DK)   (A)   (SA)

Section IV

Instructions. This part of the survey is designed to determine your awareness and use of adult education theory/practices in the GED classroom. For each statement you will have five possible choices. Please <u>circle</u> the <u>one</u> choice that most nearly approximates your extent of agreement with the statement.

      S D = Strongly Disagree   Example: (SD) (D) (DK) (A) (SA)
      D   = Disagree
      D K = Don't Know
      A   = Agree
      SA = Strongly Agree

<u>Statement</u>

1. In general, I believe that I have a good understanding of the basic principles of adult education theory/practice.

      (SD)   (D)   (DK)   (A)   (SA)

2. Adults exhibit a variety of learning styles.

      (SD)   (D)   (DK)   (A)   (SA)

3. An adult cannot learn very much or very well from teaching methods used primarily with children.

      (SD)   (D)   (DK)   (A)   (SA)

4. As a GED instructor, I am a provider of knowledge rather than a facilitator of learning.

      (SD)   (D)   (DK)   (A)   (SA)

Statement

5. Adult learning must have personal and immediate application for the GED student.

    (SD)   (D)   (DK)   (A)   (SA)

6. Most adult students are resistant to change.

    (SD)   (D)   (DK)   (A)   (SA)

7. Adults can benefit greatly from peer learning.

    (SD)   (D)   (DK)   (A)   (SA)

8. The life experiences of adults have little application to learning new material.

    (SD)   (D)   (DK)   (A)   (SA)

9. Adults may attempt to hide their undereducation by employing defense mechanisms.

    (SD)   (D)   (DK)   (A)   (SA)

10. As a GED instructor, I should never admit to my students that I do not know an answer.

    (SD)   (D)   (DK)   (A)   (SA)

11. I make a genuine effort to listen to my students' personal problems.

    (SD)   (D)   (DK)   (A)   (SA)

12. My GED classroom environment provides both physical and psychological comfort and support for the learner.

    (SD)   (D)   (DK)   (A)   (SA)

13. I exhibit a sense of humor in the classroom as a GED instructor.

    (SD)   (D)   (DK)   (A)   (SA)

14. GED students have often had unpleasant past experiences with school and may exhibit a genuine fear of the school setting.

    (SD)   (D)   (DK)   (A)   (SA)

15. The adult's motivation for learning is often more intrinsic than extrinsic.

    (SD)   (D)   (DK)   (A)   (SA)

Section V

Instructions. This part of the survey asks you to identify by name or social security number your GED students who took the GED Test in December 1990 and who were first time test-takers. If none of your GED students took the test in December 1990, I would like for you to still send me your completed survey in the envelope provided. This information will be used for research purposes only. The only person using this information will be the researcher. No names of teachers or students or any individual GED program or school division will be identified in the results as part of this study.

Student Name   Student Name

1. _____   5. _____
2. _____   6. _____
3. _____   7. _____
4. _____   8. _____

Comments

If you have any comments, suggestions, or criticisms you think will be helpful to me, please include them in the space provided:

Results of Survey

Would you like to receive a copy of the results of this study?   1. YES   2. NO

Thank you very much for your time and participation in this study!

If this questionnaire becomes separated from the return envelope, please send it to me at the following address:

Rodger L. Doss
224 Spring Drive
Colonial Heights, VA 23834

APPENDIX B

Survey Field-Test Checklist

Survey Field-Test Checklist

<u>Directions</u>. Please circle "Yes" or "No" after each question. <u>Add</u> comments where appropriate. Please return this checklist with the questionnaire in the envelope provided.

1. Do the questions/statements in sections 1-4 adequately cover the issues of demographics, instructional approach to writing for the essay component, perceptions toward inservice training for the essay component, and use of adult learning theory/practice in the GED classroom?

> YES   NO

Comments:

2. Are all of the questions/statements necessary?

> YES   NO

Comments:

3. Are additional questions/statements needed to adequately cover the issues?

> YES   NO

Comments:

4. Do any of the questions/statements introduce bias about the issues?

> YES   NO

Comments:

Are any of the questions/statements ambiguous or unclear?

       YES   NO

Comments:

Do you have any questions about the format of the questionnaire or any of the directions?

       YES   NO

Comments:

How long did it take you to complete the questionnaire?

If you have any additional comments, please include them here.

Comments:

APPENDIX C

Additional Tables

Table C-1

Distribution of Respondents by Gender

Gender	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Female	90	79.6	26	86.7
Male	23	20.4	4	13.3
Total	113	100.0	30	100.0

Table C-2

Distribution of Respondents by Race

| | Group R | | Sub-group T | |
Race	N	%	N	%
White	90	80.4	23	79.3
Black	20	17.8	6	20.7
Hispanic	2	1.8		
No Response	1		1	
Total	113	100.0	30	100.0

Table C-3

Distribution of Respondents by Age

Age	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
21-30	11	10.2	2	7.4
31-40	29	26.9	8	29.6
41-50	48	44.4	14	51.9
51-60	13	12.0	2	7.4
61 or older	7	6.5	1	3.7
No Response	5		3	
Total	113	100.0	30	100.0

Table C-4

Distribution of Respondents by Educational Background

Educational Background	Group R		Sub-group T	
	N	%	N	%
Some College	2	1.8		
Associate's Degree	1	0.9		
Bachelor's Degree	17	15.0	5	16.6
Some Graduate Work	33	29.2	8	26.7
Master's Degree	58	51.3	17	56.7
Doctorate Degree	2	1.8		
Total	113	100.0	30	100.0

Table C-5

Distribution of Respondents by Teaching in Public School

Teaching in Public School	Group R		Sub-group T	
	N	%	N	%
Yes	58	51.3	15	50.0
No	55	48.7	15	50.0
Total	113	100.0	30	100.0

Table C-6

Distribution of Respondents by Grade Level Taught

Grade Level Taught	Group R		Sub-group T	
	N	%	N	%
Elementary School	18	37.5	5	50.0
Middle School	9	18.7		
Senior High School	21	43.8	5	50.0
Do Not Teach in Public School System	55		15	
No Response	10		5	
Total	113	100.0	30	100.0

Table C-7

Distribution of Respondents by Undergraduate Major

Undergraduate Major	Group R		Sub-group T	
	N	%	N	%
Education	45	39.8	12	40.0
English	19	16.8	4	13.3
History	3	2.7	2	6.7
Math	5	4.4	3	10.0
Psychology	7	6.2	1	3.3
Science	8	7.1		
Other	26	23.0	8	26.7
Total	113	100.0	30	100.0

Table C-8

Distribution of Respondents by Membership in Adult Education

Professional Organization

| Membership in Adult Education | Group R | | Sub-group T | |
Professional Organization	$\underline{N}$	%	$\underline{N}$	%
Yes	36	31.9	12	40.0
No	77	68.1	18	60.0
Total	113	100.0	30	100.0

Table C-9

Distribution of Respondents by GED Teaching Status

	Group R		Sub-group T	
GED Teaching Status	N	%	N	%
Part-time	109	96.5	28	93.3
Full-time	4	3.5	2	6.7
Total	113	100.0	30	100.0

Table C-10

Distribution of Respondents by Total Years as a GED Teacher

| | Group R | | Sub-group T | |
Total Years GED Teacher	$\underline{N}$	%	$\underline{N}$	%
1 Year	22	19.5	5	16.7
2-5 Years	55	48.7	11	36.7
6-10 Years	17	15.0	4	13.3
11-15 Years	15	13.3	8	26.6
16-20 Years	4	3.5	2	6.7
Total	113	100.0	30	100.0

Table C-11

Distribution of Respondents by Weeks Per Year Teaching GED

Coursework

Weeks Per Year Teaching GED Coursework	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Less than 10 weeks	7	6.9	1	4.2
11-20 Weeks	9	8.8	1	4.2
21-30 Weeks	18	17.6	4	16.6
31-40 Weeks	44	43.1	9	37.5
41-50 Weeks	22	21.6	9	37.5
Over 50 Weeks	2	2.0		
No Response	11		6	
Total	113	100.0	30	100.0

Table C-12

Distribution of Respondents by Hours Per Week Teaching GED

Coursework

Hours Per Week Teaching GED Coursework	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Less than 5	57	50.9	12	40.0
6-10 Hours	32	28.5	7	23.3
11-15 Hours	7	6.2	2	6.7
16-20 Hours	6	5.4	3	10.0
21-25 Hours	6	5.4	3	10.0
26-30 Hours	1	0.9	1	3.3
Over 30 Hours	3	2.7	2	6.7
No Response	1			
Total	113	100.0	30	100.0

Table C-13

Distribution of Respondents by Hours Per Week Teaching for Essay

Component

Hours Per Week Teaching for Essay Component	Group R		Sub-group T	
	N	%	N	%
Less than 2 Hours	64	62.1	13	48.2
3-4 Hours	24	23.3	8	29.6
5-6 Hours	8	7.8	3	11.1
7-8 Hours	4	3.9	2	7.4
Over 9 Hours	3	2.9	1	3.7
No Response	10		3	
Total	113	100.0	30	100.0

Table C-14

Distribution of Respondents by Training in Teaching of Writing to Adults

Training in Teaching of Writing to Adults	Group R		Sub-group T	
	N	%	N	%
Yes	71	62.8	23	76.7
No	42	37.2	7	23.3
Total	113	100.0	30	100.0

Table C-15

Distribution of Respondents by Type of Training in Teaching of Writing to Adults

Type of Training in Teaching of Writing to Adults	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Course	6	8.8	1	4.3
Courses	11	16.2	4	17.4
Workshop	7	10.3		
Workshops	18	26.5	12	52.2
Inservice	1	1.5		
Inservices	11	16.2	4	17.4
Course and Workshops	2	2.9		
Workshops and Inservices	10	14.7	2	8.7
Other	2	2.9		
No Training	42		7	
No Response	3			
Total	113	100.0	30	100.0

Table C-16

Distribution of Respondents by Training in Adult Education Theory/ Principles

Training in Adult Education Theory/Principles	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Yes	71	62.8	23	76.7
No	42	37.2	7	23.3
Total	113	100.0	30	100.0

Table C-17

Distribution of Respondents by Type of Training in Adult Education
Theory/Principles

Type of Training in Adult Education Theory/Principles	Group R		Sub-group T	
	N	%	N	%
Course	3	4.6		
Courses	14	21.6	5	22.7
Workshop	3	4.6	1	4.6
Workshops	18	27.7	7	31.9
Inservice	3	4.6		
Inservices	8	12.3	3	13.6
Course and Workshops	5	7.7	3	13.6
Course and Inservice	2	3.1		
Workshops and Inservice	8	12.3	3	13.6
Other	1	1.5		
No Training	42		7	
No Response	6		1	
Total	113	100.0	30	100.0

Table C-18

Distribution of Respondents by Training in the Teaching of Writing

Skills for the Essay Component

Training in Teaching of Writing Skills for the Essay Component	Group R		Sub-group T	
	$\underline{N}$	%	$\underline{N}$	%
Yes	48	42.5	14	46.7
No	65	57.5	16	53.3
Total	113	100.0	30	100.0

Table C-19

Distribution of Respondents by Type of Training in Teaching of Writing Skills for the Essay Component

Type of Training in Teaching Writing Skills for the Essay Component	Group R		Sub-group T	
	N	%	N	%
Course	2	4.5		
Courses	2	4.5	1	7.1
Workshop	8	18.2	3	21.5
Workshops	8	18.2	4	28.6
Inservice	2	4.5		
Inservices	10	22.8	1	7.1
Course and Workshops	4	9.0	1	7.1
Workshops and Inservice	7	16.0	4	28.6
Other	1	2.3		
No Training	65		16	
No Response	4			
Total	113	100.0	30	100.0

Table C-20

Comparison of Categorical Demographic Variables for Teachers Who
Identified Students and Teachers Who Did Not Identify Students

Categorical Demographic Variable	Teachers Who Identified Students		Teachers Who Did Not Identify Students		Chi-Square	p
	N	%	N	%		
Race						
White	23	79.3	67	80.7	0.027	0.869
Other	6	20.7	16	19.3		
Education						
Master's or						
Above	17	56.7	43	51.8	0.466	0.495
Below Master's	13	43.3	40	48.2		
Undergraduate Major						
Education	12	40.0	33	39.8	0.001	0.982
Other	18	60.0	50	60.2		
Teach in Public School?						
Yes	15	50.0	43	51.8	0.029	0.865
No	15	50.0	40	48.2		
Grade Level Taught						
Senior High	5	50.0	16	42.1	0.201	0.654
Elem. & Middle	5	50.0	22	57.9		
Training in Adult Writing?						
Yes	23	76.7	48	57.8	3.347	0.067
No	7	23.3	35	42.2		
Training in Adult Education Theory/Principles?						
Yes	23	76.7	48	57.8	3.347	0.067
No	7	23.3	35	42.2		
Training in Teaching Writing Skills for Essay Component?						
Yes	14	46.7	34	41.0	0.293	0.588
No	16	53.3	49	59.0		

(Table Continues)

Table C-20 (continued)

Comparison of Categorical Demographic Variables for Teachers Who

Identified Students and Teachers Who Did Not Identify Students

Categorical Demographic Variable	Teachers Who Identified Students		Teachers Who Did Not Identify Students		Chi-Square	p
	N	%	N	%		
Member of Adult Education Professional Organization?						
Yes	12	40.0	24	29.0	1.247	0.264
No	18	60.0	59	71.0		
Gender						
Male	4	13.3	19	22.9	1.242	0.265
Female	26	86.7	64	77.1		
Type of Training in Teaching Writing to Adults						
Course(s)	5	21.7	12	26.7	0.197	0.657
No Course(s)	18	78.3	33	73.3		
Type of Training in Adult Education Theory/Principles						
Course(s)	5	22.7	12	27.9	0.202	0.653
No Course(s)	17	77.3	31	72.1		
Type of Training in Teaching Writing Skills for Essay Component						
Course(s)	1	7.1	3	10.0	0.094	0.759
No Course(s)	13	92.9	27	90.0		

Table C-21

Distribution of Respondents by Self-Identified Instructional Approach

Instructional Approach	Group R		Sub-group T	
	N	%	N	%
Combination	90	79.6	24	80.0
Process	20	17.7	5	16.7
Product	2	1.8	1	3.3
None of the Above Approaches	1	0.9		
Total	113	100.0	30	100.0

Table C-22

Distribution of Respondents in Group R by Product and Process

Scale Scores

	Product Scale Scores			Process Scale Scores	
Score	N	%	Score	N	%
8	3	2.9	18	1	1.1
9	2	2.0	19	1	1.1
10	2	2.0	20	2	2.1
11	2	2.0	21	1	1.1
12	3	2.9	22	1	1.1
13	4	3.9	23	3	3.2
14	5	4.9	24	7	7.4
15	6	5.9	25	6	6.3
16	7	6.9	26	8	8.4
17	7	6.9	27	5	5.2
18	10	9.8	28	17	17.8
19	7	6.9	29	5	5.2
20	12	11.7	30	10	10.5
21	7	6.9	31	5	5.2
22	8	7.8	32	9	9.5
23	6	5.9	33	8	8.4
24	2	2.0	34	3	3.2
25	3	2.9	38	1	1.1
26	2	2.0	40	2	2.1
27	2	2.0	Missing	18	
28	1	0.9	Scores		
29	1	0.9			
Missing	11				
Scores					
Total	113	100.0	Total	113	100.0

Table C-23

Descriptive Statistics for Group R on Product and Process Scales

	Product Scale			Process Scale	
$\underline{N}$	Mean	S.D.	$\underline{N}$	Mean	S.D.
102	18.26	4.65	95	28.40	4.11

Table C-24

Distribution of Respondents in Sub-group T by Product and Process

Scale Scores

Product Scale Scores			Process Scale Scores		
Score	N	%	Score	N	%
8	1	3.7	19	1	3.8
9	2	7.4	21	1	3.8
10	1	3.7	22	1	3.8
11	1	3.7	25	1	3.8
12	1	3.7	26	2	7.7
13	1	3.7	27	3	11.6
14	2	7.4	28	3	11.6
15	2	7.4	29	1	3.8
16	2	7.4	30	3	11.6
17	2	7.4	31	1	3.8
18	1	3.7	32	3	11.6
19	2	7.4	33	4	15.4
20	4	14.9	34	2	7.7
21	2	7.4			
22	2	7.4			
29	1	3.7			
Missing Scores	3		Missing Scores	4	
Total	30	100.0	Total	30	100.0

Table C-25

Descriptive Statistics for Sub-group T on Product and Process Scales

Product Scale			Process Scale		
$\underline{N}$	Mean	S.D.	$\underline{N}$	Mean	S.D.
27	16.56	4.91	26	28.85	4.05

Table C-26

Distribution of High and Low Scoring Group R Respondents

on the Product and Process Scales

	Product Scale			Process Scale		
Score	N	%	Score	N	%
High	51	50.0	High	43	45.3
Low	51	50.0	Low	52	54.7
Missing Scores	11		Missing Scores	18	
Total	113	100.0	Total	113	100.0

Table C-27

Distribution of High and Low Scoring Sub-group T Respondents

on the Product and Process Scales

Product Scale			Process Scale		
Score	N	%	Score	N	%
High	11	40.7	High	14	53.8
Low	16	59.3	Low	12	46.2
Missing Scores	3		Missing Scores	4	
Total	30	100.0	Total	30	100.0

Table C-28

Comparison of Product and Process Group Membership for
Respondents in Sub-group T as Defined by Scale Scores

Category	$\underline{N}$	%	Chi-square	$\underline{p}$
High Process/Low Product	9	36.0	0.96	.327
High Product/Low Process	6	24.0		
High Process/High Product	4	16.0		
Low Process/Low Product	6	24.0		
Total	25	100.0		

Table C-29

Descriptive Statistics of Sub-group T for Averaged Essay Test Scores

N	Mean	S.D.
30	6.47	0.685

Table C-30

ANOVA Table for Averaged Essay Test Scores by Product and Process
Scale Score Groups (Instructional Approach)

Scale (Instructional Approach)	Source of Variation	df	SS	MS	F	p
Product	Between	1	35.91	35.91	0.01	0.928
	Within	25	108085.16	4323.41		
Process	Between	1	7208.82	7208.82	1.75	0.198
	Within	24	98710.37	4112.93		

Table C-31

Descriptive Statistics for the Comparison of Students' Averaged Essay Test Scores for Teachers Determined as Scoring High or Low on the Product and Process Scales (Instructional Approach)

Scale (Instructional Approach)	N	Mean	S.D.
Product			
High	11	6.43	.5649
Low	16	6.45	.7126
Process			
High	14	6.55	.5965
Low	12	6.22	.6903

Table C-32

Descriptive Statistics for Respondents in Group R by Inservice Statements

Inservice Statement	N	Mean	S.D.
1. The addition of the essay component to the Writing Skills Test necessitates the development of a state-sponsored inservice training program to assist GED instructors to acquire the appropriate techniques, methods, and strategies to teach writing.	111	3.649	1.093
2. Any inservice training program developed for GED teachers who teach writing skills for the essay component should include an assessment of these teachers' needs.	112	4.036	0.684
3. The GED teachers who teach writing skills for the essay component should be the primary source of ideas for the improvement of their inservice training.	111	3.739	0.860
4. Inservice training for GED instructors who teach writing skills for the essay component is important for professional growth.	111	3.955	0.824
5. The optional time to offer inservice training for the essay component is during the summer.	110	3.136	1.169
6. All GED teachers who teach writing skills for the essay component should receive some inservice training to address this new test addition.	112	3.786	0.934
7. Curriculum content for inservice training programs for the essay component of the Writing Skills Test should primarily be the responsibility of experts in writing.	111	2.649	0.988
8. Principles of adult learning and development should be incorporated into any inservice program for GED instructors who teach writing skills for the essay component.	112	4.107	0.740

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Table C-32 (continued)

Descriptive Statistics for Respondents in Group R by Inservice Statements

Inservice Statement	N	Mean	S.D.
9. The inservice training that addresses the essay component should attempt to increase the research knowledge base of the teacher participants.	111	3.378	0.935
10. Inservice training for the essay component should be designed to change teacher behaviors before attempting to change teacher attitudes.	109	2.477	0.909
11. GED instructors should receive tangible rewards or incentives for participating in inservice training for the essay component of the Writing Skills Test.	110	3.773	1.029
12. Inservice training for the essay component should be designed to address only the short-term needs of GED instructors.	110	2.436	0.894
13. Inservice training for the essay component should be spaced over time rather than administered in a "one-shot" intensive session.	111	3.306	1.025
14. Inservice training for the essay component should be designed primarily to help the GED teacher "teach to the test."	107	2.617	1.061
15. Inservice training for the essay component should rely on lecture as the primary delivery mode.	111	2.063	0.856
16. All inservice training activities for the essay component should have specified objectives.	111	4.126	0.624

Table C-33

Descriptive Statistics for Respondents in Group R by Adult Education Theory Statements

Adult Education Theory Statements	N	Mean	S.D.
1. In general, I believe that I have a good understanding of the basic principles of adult education theory/practice.	113	4.044	0.603
2. Adults exhibit a variety of learning styles.	113	4.549	0.500
3. An adult cannot learn very much or very well from teaching methods used primarily with children.	109	2.853	1.112
4. As a GED instructor, I am a provider of knowledge rather than a facilitator of learning.	113	1.788	0.784
5. Adult learning must have personal and immediate application for the GED student.	112	3.920	0.912
6. Most adult students are resistant to change.	112	2.732	1.022
7. Adults can benefit greatly from peer learning.	113	4.106	0.783
8. The life experiences of adults have little application to learning new material.	113	1.469	0.599
9. Adults may attempt to hide their undereducation by employing defense mechanisms.	113	4.292	0.703

Table C-33 (continued)

Descriptive Statistics for Respondents in Group R by Adult Education Theory Statements

Adult Education Theory Statements	N	Mean	S.D.
10. As a GED instructor, I should never admit to my students that I do not know an answer.	113	1.327	0.471
11. I make a genuine effort to listen to my students' personal problems.	113	4.159	0.808
12. My GED classroom environment provides both physical and psychological comfort and support for the learner.	112	4.357	0.656
13. I exhibit a sense of humor in the classroom as a GED instructor.	112	4.554	0.499
14. GED students have often had unpleasant past	113	4.451	0.744
15. The adult's motivation for learning is often more intrinsic than extrinsic.	108	3.824	0.915

APPENDIX D

Correspondence

COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION
P.O. BOX 6-Q
RICHMOND 23216-2060

To: GED Administrators
From: Lennox McLendon, Associate Director L.M.
    Adult Education Service
    Virginia Department of Education
Subject: GED Writing Skills Study
Date: November 15, 1990

    I am writing to request your cooperation for a research study supported by this office and conducted by Rodger L. Doss of Virginia Commonwealth University. The study is designed to gather information on Virginia public-school GED teachers who teach writing skills for the essay component of the GED Writing Skills Test.

    We have provided Mr. Doss with your name and mailing address as the GED administrator in your area. Please assist this study by reviewing the enclosed list of teachers who have been identified as teaching a GED Combination Class or Writing Skills Class for your GED program. Please provide each teacher's first name or initial and either a school or home mailing address. If the persons listed no longer teach for your GED program, or if no teacher list is enclosed for you, please furnish Mr. Doss with the new or omitted teachers' names and mailing addresses. The information you provide is necessary to mail survey questionnaires to these teachers as part of the study.

    Please return the information in the stamped, self-addressed envelope provided by November 30, 1990. Also, I ask you to please encourage your GED teachers to respond to their questionnaires when they receive them.

November 15, 1990

Dear GED Administrator:

    I am currently conducting a research study whose focus is the teaching of writing skills for the essay component of the GED Writing Skills Test. Lennox McLendon and his staff in the Adult Education Service Department of the Virginia Department of Education have been very supportive of my study and have provided valuable assistance since the study's inception. As part of their assistance, they have given me your name and address as the administrator of the GED program in your area. Also, in most cases they have provided me with the name(s) of the person(s) in your GED program that teach either a GED Combination Class or a Writing Skills Class. These teachers' names were taken from the list of names of teachers paid by the Commonwealth of Virginia through General Adult Education Funds in 1989-90. I have included your teacher list as part of the enclosures.

    I would greatly appreciate it if you would review the enclosed list of teachers and then provide me with a first name and either a school or home mailing address. Please provide the information on the enclosed list and return it to me in the envelope provided by November 30, 1990. If there are no teachers' names provided on the enclosed list or if the list is not accurate, please provide me with the current information. I will use the information you give me to mail questionnaires to your teachers to collect data on teacher demographics, approaches to writing, perceptions toward inservice training, and use of adult education theory/practice. I will also ask them to provide me with the names of their students who are taking the GED TEST in December 1990 and who are first-time test-takers. We will use that information to examine a sample of student essays.

    All information you and your teachers provide will be strictly confidential. No individual GED programs, administrators, teachers, or students will be identified as part of this study. Thank you in advance for your support and cooperation with this endeavor. I believe the findings will be very beneficial to all of us interested in adult education.

Sincerely,

Rodger L. Doss

TO: Adult Education Administrators and Instructors

FROM: Rodger L. Doss, Virginia Commonwealth University

RE: Field Testing of Research Survey

DATE: December 5, 1990

    I am writing to request your assistance with a research project which I am undertaking as part of my doctoral dissertation in adult education and training at Virginia Commonwealth University. The focus of the study is the teaching of writing skills for the essay component of the GED Writing Skills Test. Specifically, I will survey Virginia public-school GED teachers who teach writing skills for the essay component to collect data on teacher demographics, approaches to writing, perceptions toward inservice training, and use of adult education theory/practices in the GED classroom.

    It would be of great help to me if you would provide me with some input about the enclosed questionnaire. Please review the questionnaire and then answer the questions on the checklist which is enclosed.

    Please return the questionnaire and the checklist to me in the envelope provided by December 14, 1990. Feel free to make any notes or write any comments on the questionnaire as you review it.

    Thank you very much for your time and assistance with this project!

December 14, 1990

Dear GED Administrator:

I recently sent you a letter with a request for your assistance with a research project which I am conducting at Virginia Commonwealth University and which is supported by the Adult Education Service Department of the Virginia Department of Education. The focus of the study is the teaching of writing skills for the essay component of the GED Writing Skills Test.

In the letter I sent to you, I asked you to review the enclosed list of teachers' names who have been identified by the Dept. of Education as teaching a GED Combination Class or Writing Skills Class in your GED program. I certainly realize that you are very busy at this time, but I have not received a reply from you to date.

I ask you again to please take the time to review the enclosed list of teachers and then provide me with a first name and either a school or home mailing address. Please return the information to me by December 28, 1990. If there are no teachers' names provided on the enclosed list or if the list is not accurate, please provide me with the current information.

All information you provide will be strictly confidential. No individual GED programs, administrators, teachers, or students will be identified as part of this study. Thank you again for your time and cooperation with this project.

Sincerely,

Rodger L. Doss

COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION
P.O. BOX 6-Q
RICHMOND 23216-2060

TO: GED Writing Skills Teachers

FROM: ennox McLendon, Associate Director
Adult Education Service
Virginia Department of Education

Claiborne Leonard, GED Chief Examiner
Adult Education Service
Virginia Department of Education

RE: GED Writing Skills Study

DATE: January 11, 1991

We are requesting your cooperation for a research study supported by this office and conducted by Rodger L. Doss of Virginia Commonwealth University. The study is designed to gather information on Virginia public-school GED teachers who teach writing skills for the essay component of the GED Writing Skills Test.

Please assist this study by completing the enclosed questionnaire and returning it in the envelope provided by January 31, 1991.

The GED administrator in your area has been contacted by Mr. Doss and is aware that the study is being conducted. All information you provide will be strictly confidential.

Thank you in advance for your participation, support, and cooperation in this research endeavor.

January 11, 1991

Dear GED Teacher:

I am currently conducting a research study whose focus is the teaching of writing skills for the essay component of the GED Writing Skills Test. Through the support and help of both the Adult Education Service Department of the Virginia Department of Education and the GED administrator in your locality, you have been identified as teaching either a GED Combination Class or a Writing Skills Class.

I would greatly appreciate it if you would assist my research efforts by completing the enclosed survey and returning it to me in the envelope provided by January 31, 1991. The information you provide is essential if the study is to be accurate and beneficial to those of us engaged in adult education.

In November 1990, I contacted your local GED administrator and briefly outlined my study. I also asked the GED administrator to review, update, and return to me a list of GED teachers which the Adult Education Service had provided to me. I am including in this study all GED teachers whose names were returned to me by the local GED administrator.

All the information you provide will be strictly confidential and no individual teacher, student, school division, or GED program will be identified in the results of the study.

Please take time out of your busy schedule and help me with this study. Thank you in advance for your cooperation.

Sincerely,

Rodger L. Doss

224 Spring Drive
Colonial Heights, VA 23834

February 5, 1991

Dear GED Instructor:

Several weeks ago I sent you a research questionnaire whose focus is writing skills for the essay component of the GED Writing Skills Test. Many of you have returned them to me and I thank you sincerely.

If you have not returned your questionnaire, please do so today. Due to the relatively small number of subjects in this study, each and every questionnaire is very important. I encourage you to take a little time out of your busy schedule to complete and return the survey to me by February 16. To make things a bit more convenient for you, I have enclosed additional postage to be added to the return envelope I originally sent with the survey.

If you did not receive your questionnaire, or if it has been misplaced, please call me collect at (804)526-3068 and I will forward one to you.

Thank you for your time and consideration in this research endeavor.

Sincerely,

Rodger L. Doss

February 20, 1991

Dear GED Instructor:

I really need your help! As of today I have not received your completed questionnaire on writing skills for the GED Writing Skills Test. I cannot overemphasize the importance of your response to help attain overall accuracy in the study I am undertaking.

I belive that this study can prove very beneficial to all of us who are involved with teaching adults for the GED Tests, because it seeks to tap the teachers' views about instructional approaches, inservice training, and adult education principles which can be very useful for future planning at state and local levels.

So, please take the time to complete the survey and return it to me by March 2, 1991. If, by chance, your questionnaire has been misplaced, you will find enclosed a replacement and a stamped return envelope. If you have returned your question-naire, please accept my most sincere gratitude.

Sincerely,

Rodger L. Doss

February 20, 1991

Dear GED Administrator:

When I last contacted you in November 1990, I asked for your cooperation with a research project which I was undertaking on writing skills for the GED Writing Skills Test. The assistance you provided by furnishing the names and addresses of your GED instructors who teach either a GED Combination Class or a Writing Skills Class was sincerely appreciated and the study is steadily progressing toward a conclusion.

In order to make the study as accurate as possible, I am once again asking for your help. I would like to attain a very positive return rate from the teachers which were surveyed. Recently I sent a replacement questionnaire and stamped envelope to all teachers in the study from whom I have not yet received a reply. I would be very grateful if you would assist this study once again by reviewing the enclosed list of teachers' names from your region and encouraging them to return their questionnaires to me by March 2, 1991.

Thank you very much for all of your time, patience, and cooperation. It means a great deal to me.

Sincerely,

Rodger L. Doss

Teachers

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3.
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Vita