

71-7479

HENNING, Mary Joell Haynes, 1937-
A STUDY OF IN-SERVICE TEACHERS' KNOWLEDGE OF
EDUCATION IN AN URBAN SETTING. [Pages 96 to
105, "The Urban Education Test in Teaching the
Disadvantaged," not microfilmed at request
of author. Available for consultation at the
Ohio State University Library].

The Ohio State University, Ph.D., 1970
Education, teacher training

University Microfilms, A XEROX Company, Ann Arbor, Michigan

© Copyright by

Mary Joell Haynes Henning

1971

A STUDY OF IN-SERVICE TEACHERS' KNOWLEDGE
OF EDUCATION IN AN URBAN SETTING

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

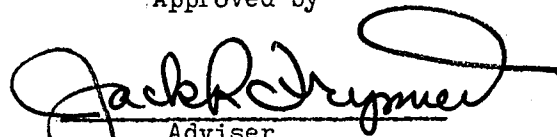
By

Mary Joell Haynes Henning

* * * * *

The Ohio State University
1970

Approved by


Adviser
College of Education

ACKNOWLEDGEMENTS

The encouragement and assistance of many people has made this study possible. The author wishes to express special appreciation to Dr. Jack R. Frymier who has been both adviser and friend during her graduate studies at The Ohio State University.

Appreciation is also extended to Dr. Paul R. Klohr and Dean Arliss Roaden who comprised the author's reading committee.

Sincere gratitude is extended to John Wyckoff who did the initial programming of the data and who spent time with the author interpreting the data.

The author wishes to convey special thanks to the administrators in both sample areas whose willingness to participate in the testing program made this study possible.

The writer owes a special appreciation to her family for their support and encouragement throughout the years.

Finally, the writer expresses deep gratitude to her husband, William Lewis Henning, Jr., who has been statistician, proof-reader, minor adviser, and sometime consoler during the months of this study.

VITA

July 30, 1937 . . . Born - Superior, Wisconsin
1960-1965 Junior high school English and music teacher
in Wisconsin parochial schools
1965. B.A., Viterbo College, LaCrosse, Wisconsin
1965-1967 Senior high school English teacher,
Aquinas High School, LaCrosse, Wisconsin
1968. M.A., The Ohio State University, Columbus,
Ohio
1968-1970 Teaching Assistant, Research Assistant,
Department of Curriculum and Foundations,
College of Education, The Ohio State
University, Columbus, Ohio

FIELDS OF STUDY

Major Field: Education

Studies in Curriculum and Instruction. Professors Jack R.
Frymier and Paul R. Klohr

Studies in English Education. Professors Frank Zidonis and
Wilfred Eberhart

Studies in Teacher Education. Professors Charles Galloway and
L.O. Andrews

TABLE OF CONTENTS

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| ACKNOWLEDGEMENTS | ii |
| VITA | iii |
| TABLES | vii |
| CHAPTER | |
| I. INTRODUCTION AND REVIEW OF THE LITERATURE | 1 |
| Purpose of the Study | 2 |
| Definition of Terms | 3 |
| Statement of Hypotheses | 5 |
| Review of the Literature | 7 |
| Categories of Literature | 8 |
| Observations and Studies Focusing on the Teacher of the Educationally Disadvan- taged Student | 8 |
| Literature Describing Teacher Education Programs and Specific Instructional Approaches for Teaching the Educationally Disadvantaged Student | 14 |
| Literature Dealing with Perceptions, Attitudes, and Academic Achievement of the Educationally Disadvantaged Student | 23 |
| Literature Describing the Learning Difficulties of the Educationally Disadvantaged Student and the Origin and Effect of these Learning Difficulties. | 27 |
| II. METHODOLOGY OF STUDY | 33 |
| Description of the Test | 33 |
| Nature of the Study | 33 |
| Selection of Samples | 34 |
| Description of Sample Area A: A Low Socio- Economic Community. | 34 |
| Population and Population Characteristics | 34 |
| Education | 35 |
| Income | 35 |
| Socio-Economic Characteristics | 36 |
| School District | 36 |
| Curriculum | 37 |
| Students. | 37 |
| Causes for Educational Problems | 38 |
| Model City Program Approaches | 39 |

| | |
|----------------------------------------------------------|-----|
| Administration of Test Instrument in Sample | |
| Area A | 40 |
| Description of Sample Area B: A High Socio- | |
| Economic Community | 42 |
| Population and Population Characteristics. . . | 42 |
| Education. | 42 |
| Economic Conditions | 43 |
| School District. | 43 |
| Administration of Test Instrument in Sample | |
| Area A | 44 |
| Data Analysis | 44 |
| Variables. | 44 |
| Method of Analysis | 46 |
| Definition of Mathematical Terms | 46 |
| III. IN-SERVICE TEACHERS' KNOWLEDGE OF THE DISADVANTAGED | |
| LEARNER: LOW SOCIO-ECONOMIC SAMPLE (SAMPLE A) . . | 49 |
| Conceptual Framework Coding | 55 |
| Multiple Regression Equation for Low Socio- | |
| Economic Area. | 59 |
| IV. IN-SERVICE TEACHERS' KNOWLEDGE OF THE DISADVANTAGED | |
| LEARNER: HIGH SOCIO-ECONOMIC SAMPLE (SAMPLE B) . | 60 |
| Conceptual Framework. | 68 |
| Multiple Regression Equation for High Socio- | |
| Economic Area | 72 |
| V. SUMMARY OF TEST PERFORMANCE: IN-SERVICE TEACHERS | |
| FROM HIGH SOCIO-ECONOMIC AREA, IN-SERVICE TEACHERS | |
| FROM LOW SOCIO-ECONOMIC AREA, AND PRE-SERVICE | |
| TEACHERS | 73 |
| Multiple Regression Equation for In-Service | |
| Teachers | 86 |
| VI. SUMMARY AND CONCLUSIONS | 87 |
| Educational Implications | 92 |
| Recommendations for Further Study. | 94 |
| APPENDICES. | 95 |
| Appendix A | 95 |
| Appendix B | 106 |
| Appendix C | 110 |

| | |
|------------------------|-----|
| BIBLIOGRAPHY | 114 |
|------------------------|-----|

LIST OF TABLES

| Table | Page |
|-----------------------------------------------------------------------------------------------------------|------|
| 1. Summary of Teacher Response by School, Sample Area A | 50 |
| 2. Summary of Test Performance, Entire Sample, Low Socio-Economic Area | 51 |
| 3. Summary of Test Performance by Sex in Low Socio-Economic Area | 51 |
| 4. Summary of Test Performance by Race, Low Socio-Economic Area | 52 |
| 5. Summary of Test Performance by Years of Teaching Experience, Low Socio-Economic Area | 53 |
| 6. Summary of Test Performance by Teaching Level, Low Socio-Economic Area | 53 |
| 7. Summary of Test Performance by Subject Matter Area, Low Socio-Economic Area | 54 |
| 8. Summary of Test Performance of Science-Mathematics and Humanities Teachers, Low Socio-Economic Area. . | 55 |
| 9. Item Analysis of Test Performance, Low Socio-Economic Area. | 56 |
| 10. Summary of Teacher Response by School, Sample Area B | 61 |
| 11. Summary of Test Performance, Entire Sample, High Socio-Economic Area | 62 |
| 12. Summary of Test Performance by Sex in High Socio-Economic Area | 62 |
| 13. Summary of Test Performance by Years of Teaching Experience, High Socio-Economic Area | 63 |
| 14. Summary of Test Performance by Teaching Level, High Socio-Economic Area | 64 |
| 15. Summary of Test Performance by Subject Matter Area, High Socio-Economic Area | 65 |

| Table | Page |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 16. Summary of t-values and Levels of Significance by Subject Matter Area | 66 |
| 17. Summary of Test Performance of Science-Mathematics and Humanities Teachers, High Socio-Economic Area | 67 |
| 18. Summary of Test Performance by Educational Background, High Socio-Economic Area. | 67 |
| 19. Item Analysis of Test Performance, High Socio-Economic Area. | 68 |
| 20. Summary of Test Performance of Entire Sample: In-Service Teachers from High Socio-Economic Area, In-Service Teachers from Low Socio-Economic Area, and Pre-Service Teachers. | 73 |
| 21. Summary of Test Performance by Sex: In-Service Teachers from High Socio-Economic Area, In-Service Teachers from Low Socio-Economic Area, and Pre-Service Teachers | 75 |
| 22. Summary of Test Performance by Race: In-Service Teachers from High Socio-Economic Area and In-Service Teachers from Low Socio-Economic Area | 76 |
| 23. Summary of Test Performance by Teaching Level: In-Service Teachers from High Socio-Economic Area and In-Service Teachers from Low Socio-Economic Area. . | 77 |
| 24. Summary of Test Performance by Years of Teaching Experience: In-Service Teachers from High Socio-Economic Area and In-Service Teachers from Low Socio-Economic Area | 78 |
| 25. Summary of Test Performance by Subject Matter Area: In-Service Teachers from High Socio-Economic Area and In-Service Teachers from Low Socio-Economic Area | 79 |
| 26. Item Analysis of Test Performance: In-Service Teachers from High Socio-Economic Area, In-Service Teachers from Low Socio-Economic Area, and Pre-Service Teachers | 81 |

CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

In the history of economic thought, education has consistently been a favored means of social improvement, especially for the poor. Karl Marx and Adam Smith both emphasized the critical need for improved education in developing general aptitudes among working men as well as in countering the erosion of public responsibility brought on by the division of labor. Malthus and Ricardo, though frequently at odds, agreed on one point--that more education was required to improve the moral fiber of the lower classes.¹

Education is valued so highly in American society that it is compulsory in most states until the age of sixteen. The school, then, is imparted the task of educating the young American--to provide learning experiences which will allow him to proceed toward the maximum development of his individual ability and capacity.

In the decade of the sixties, awareness of learning problems associated with economically and socially disadvantaged populations exploded into all levels of American society. The press, movie industry, and television specials brought the plight of the disadvantaged learner into the living rooms of middle-class America.

¹Thomas I. Ribich, Education and Poverty (The Brookings Institution: Washington, D.C., 1968), p. 2.

The problems of teaching the disadvantaged are overwhelming. Many teacher training courses are attempting to help prospective teachers "see" and "hear" the problems involved in teaching the disadvantaged learner. However, there are still far too many classroom teachers in the field and entering it who do not know the specific learning problems of the disadvantaged child.

No one would argue that specific learning problems can best be met when the teacher has a working knowledge of the particular kind of learner to whom he is relating. The classroom teacher is a crucial variable in the teaching-learning setting. The school is as productive, challenging, serviceable, and respected as the individual teachers who staff the school.

Purpose of the Study

In 1968 James B. Boyer tested pre-service teachers' knowledge of the disadvantaged learner. Boyer used The Urban Education Test on Teaching the Disadvantaged² as his testing instrument. The Boyer study revealed certain data which were used to suggest approaches for more adequate and more appropriate training for future teachers.

The purpose of this study is to describe how much in-service teachers in high socio-economic communities and in-service teachers in low socio-economic communities know about socially and economically disadvantaged learners. The Boyer-Frymier test, The Urban Education Test on Teaching the Disadvantaged was used to determine

²James B. Boyer and Jack R. Frymier, The Urban Education Test on Teaching the Disadvantaged (Columbus, Ohio: The Ohio State University, 1969).

in-service teachers' present level of understanding regarding such factors as the effect of family relationships upon language development in the child, the impact of self-concept upon motivation in disadvantaged learners, and the social and economic status of the families from which the learners come.

Definition of Terms

Cognitive concepts as used in this study refer to facts, ideas, or generalizations in the mind drawn from particular instances. These knowledges are at the levels of recall and comprehension, and are individually held as factual content.³

Pre-service teachers are those persons registered as students in collegiate programs of teacher education at colleges and universities in the United States. Further, they are persons whose teacher-training programs have included knowledge of content in both basic discipline courses and in professional education courses. Their teacher-training programs also has included student teaching (sometimes called internship) in a public or private school that is recognized as having a realistic and acceptable school program. As candidates for baccalaureate degrees with teaching specialties, these persons are normally expected to enter the service of teaching upon receipt of degrees and teaching certification.⁴

³James B. Boyer, "A Study of the Cognitive Concepts Held by Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners" (unpublished Ph.D. dissertation, The Ohio State University, 1969), p. 7.

⁴Ibid., pp. 7-8.

In-service teachers are those persons presently teaching in schools who have completed their degree programs and teaching certification requirements.

Economically disadvantaged learners are those students registered in pre-school, elementary, and secondary schools who are members of families that are considered poor based on the income scale of \$3600 per four persons in the family (scale used by the Office of Economic Opportunity of the United States Office of Health, Education, and Welfare). Further, they are the children whose families are designed as low-income families due to an absent, non-producing, or marginally-producing breadwinner. They are residents in neighborhoods where dwellings are noticeably inferior in structure, architecture, and maintenance, or they live in high-rise housing developments which are a vertical variation of horizontal low-income dwellings. Finally, they are often children whose families are recipients of public financial assistance through social welfare agencies.⁵

Socially disadvantaged learners are those registered students in pre-school, elementary or secondary schools who vary from each other in a number of ways, but whose common characteristics include (1) low social status, (2) low educational achievement, (3) lack of social experiences which tend to broaden the perceptual base and "social conditioning" of the individual, (4) lack of motivation at a level appropriate for normal school achievement or success,

⁵Ibid., p. 8.

(5) lack of interest in intellectual pursuits, (6) geographic isolation from much of the activity in the mainstream of American life, and (7) social alienation caused by racial, ethnic, or class discrimination with all its accompanying deprivations in housing, employment, and education or by membership in a different or non-English speaking subcultural group.⁶

Statement of Hypotheses

Since a review of the literature does not reveal any research studies dealing with in-service teachers' knowledge of the disadvantaged learner, the author could only speculate intuitively about the differences in knowledge of the disadvantaged learner between in-service teachers in high socio-economic communities and low socio-economic communities.

For example, it would seem that teachers in low socio-economic communities would know more about the disadvantaged learner since they work directly with disadvantaged learners. However, as the educated middle-class American moves from the inner city to the suburbs, and the teachers among them seek positions in the suburban communities in which they live, the inner city school is often left with beginning teachers, teachers who have not established enough tenure to request a transfer elsewhere, and teachers whose collegiate preparation is not adequate to warrant placement in a suburban school district. Thus it would appear that the better educated, more able teacher is working outside the inner

⁶Ibid., pp. 8-9.

city. Can it not be assumed, then, that a teacher in a high socio-economic school district would know more about EVERYTHING, including the disadvantaged learner, than the teacher in a low socio-economic school district?

The instrument used to measure in-service teachers' knowledge of the disadvantaged learner was The Urban Education Test on Teaching the Disadvantaged. All hypotheses were stated in the null form since a review of the literature did not divulge any research studies dealing with in-service teachers' knowledge of the disadvantaged learner.

Hypothesis 1. There is no significant difference in knowledge of the disadvantaged learner between teachers in high socio-economic communities and low socio-economic communities.

Hypothesis 2. There is no significant difference in knowledge of the disadvantaged learner between male and female teachers.

Hypothesis 3. There is no significant difference in knowledge of the disadvantaged learner between pre-service teachers and in-service teachers in either high or low socio-economic communities.

Hypothesis 4. There is no significant difference in knowledge of the disadvantaged learner between black and white teachers.

Hypothesis 5. There is no significant difference in knowledge of the disadvantaged learner between teachers with one to ten years of teaching experience and those with more than ten

years of teaching experience.

Hypothesis 6. There is no significant difference in knowledge of the disadvantaged learner between teachers at the elementary, junior high, and senior high school level.

Hypothesis 7. There is no significant difference in knowledge of the disadvantaged learner between teachers with a bachelor's degree and teachers with a master's degree.

Hypothesis 8. There is no significant difference in knowledge of the disadvantaged learner between teachers in the humanities area and teachers in the science and mathematics area.

Review of the Literature

Recency of Literature

The ideas and results of studies contained in this review of the literature represent the most recent efforts to find solutions to the problems of teaching and learning in disadvantaged settings. With few exceptions, the literature reviewed represents research studies published since 1960.

Limitations of Literature

The examination of research studies revealed two distinct limitations: (1) a general lack of empirical data on cognitive concepts held by teachers, and, more specifically, a lack of empirical data on teachers' knowledge of the disadvantaged and (2) a lack of empirical data regarding the appropriate instructional approaches to remedial teaching.

The quality and quantity of research is another problem

which one faces in reviewing the literature dealing with the disadvantaged child. Due to the demand for literature and research on the disadvantaged in the 1960's, many authors turned their attention to the problems of the inner city. Presses were deluged with books and articles on the subject. However, the corresponding quality of the literature often suffered.

Categories of Literature

The literature examined seemed to group itself into four general categories:

1. Observations and studies focusing on the teacher of the educationally disadvantaged student.
2. Literature describing teacher education programs and specific instructional approaches for teaching the educationally disadvantaged student.
3. Studies dealing with perceptions, attitudes, and academic achievement of the educationally disadvantaged student.
4. Literature describing the learning difficulties of the educationally disadvantaged student and the origin and effect of these learning difficulties.

The following selections are representative of the categories described above.

Observations and Studies Focusing on the Teacher of the Educationally Disadvantaged Student

As teachers work and live in the classroom, the awareness they have of their students and the social structure of the

classroom may vary to a marked degree. Such alertness to the nuances of the daily lives and the give-and-take of students should facilitate a number of teaching processes. Much concern has been voiced regarding the sensitivity of the teacher in the inner city to the specific needs and problems of the disadvantaged learner.

Rosenthal and Jacobson⁷ in Pygmalion in the Classroom report a 1965 study which concluded that (1) IQ test scores affect teacher expectations; (2) expectations of the teacher in turn affect student performance; and (3) an increase or decrease of IQ scores affects students' self-ratings. Boys whose IQ's had been fictitiously lowered felt that (1) they worked less at their school work than did other boys; (2) school was more difficult for them than for other boys; (3) their teachers were harder on them in grading than they were on other children; and (4) school was less enjoyable.

In the same vein, Rosenthal and Jacobson⁸ report another study in 1966 which employed fictitious ability groupings to learn the effects of teacher expectancy on student performance. Subjects were seventh grade students in two junior high schools located in depressed areas of different cities. Two classes of comparable ability and achievement were selected from each school. One class was arbitrarily labeled as one of the top groups in the school. Teachers were not told of the arbitrary nature of the groups. At the

⁷Robert Rosenthal and Lenore Jacobson, Pygmalion in the Classroom (New York: Holt, Rinehart and Winston, Inc., 1968), pp. 57-58.

⁸Ibid., pp. 58-59.

end of the year, tests in one school indicated that the experimental group performed better in reading and arithmetic than the control group, when in fact there were no differences in IQ.

Haubrich⁹ states that today's colleges have a dual handicap in preparing teachers for service in disadvantaged areas. On the one hand, they tend to prepare teachers for children and for schools which are only rarely found in disadvantaged areas. The educational psychology of the middle-class child, the methods which one uses in the "good school setting," and the normal constraints one applies in a typical school setting just will not work in the disadvantaged areas of large cities. On the other hand, the prospective teachers who are themselves on the rise in our society are not always eager for the challenges of teaching in disadvantaged areas. The young prospective teacher has an image of what the task of teaching is going to entail, and his home, peer group, and college tend to confirm a vague and general rejection of the disadvantaged.

Many prospective teachers picture disadvantaged areas as places where little distinction can be won and little recognition is given. Considering the emphasis in the past few years on "giftedness" and the pressure on the college student, rejection of the disadvantaged is understandable. Teaching the disadvantaged learner does not fit into the perceptual pattern the prospective teacher has learned to see and value.

⁹Vernon F. Haubrich, "The Culturally Disadvantaged and Teacher Education," The Reading Teacher, XVIII (March, 1965), 499-505.

Haubrich further observes that the sociological, anthropological, and political issues which arise in disadvantaged areas are not always as fully understood by teachers as one might hope. The impact of color in our culture, the social and economic status of the Negro and his long fight to attain even marginal recognition, is a situation that many teachers do not understand. The slums of segregated housing, the financial plight of migrant workers, the technological displacement caused by automation, and the range of psychological wounds caused by poverty are usually not part of the apperceptive mass of the typical prospective teacher. Consequently, it would be fair to say that both new and experienced teachers are operating under false assumptions and with inadequate and inaccurate information.

Variations among teachers and youth from depressed areas in terms of race, ethnic groups, and social and economic background create discontinuities in terms of values, attitudes, mores, and expectancies for each as an individual.

Teachers are part of our total society and, as such, share many prejudiced attitudes gained through years of conditioning by parents, peers, and the community at large. Similarly, the culturally deprived youth has often developed a negative, fatalistic, and simplified view of the world as a result of living in hardship amidst affluence, being denied opportunities and suffering discrimination. These youth do not behave asocially. Rather, they adopt a set of values and attitudes which are somewhat negative to society. Since school is society in miniature and the teacher a representative

of authority, these negative values and attitudes can be expected to appear in the classroom. The acceptance of these negative values and attitudes by the teacher for what they are can counter the alienation which many deprived youth experience and can help span the existing value gap between teacher and student.

Such positive attitudes as objectivity, acceptance of differences in people, firmness and consistency, warmth and respect, and, above all, flexibility, are advocated by Goldberg.¹⁰ She suggests that the successful teacher of disadvantaged youth adopt the position of an anthropologist, viewing the alien culture of the students not as a judge, but as a student.

The attitudes most often advanced by educators as essential for successful relationships between parents and teachers of disadvantaged youth are respect and acceptance. The Educational Policies Commission emphasizes respect as the most needed quality of the teacher of the disadvantaged learner. " . . . with respect for the child, the teacher can become an effective model and inspiration. He is then in a position to further the cause of learning and cultural change."¹¹

Brownell¹² cautions that teachers need to reflect an

¹⁰ Miriam L. Goldberg, "Adapting Teacher Styles to Pupil Differences: Teachers for Disadvantaged Children," Merrill-Palmer Quarterly (April, 1964), 168-170.

¹¹ Educational Policies Commission, Education and the Disadvantaged American (Washington, D.C.: National Education Association, 1962), p. 19.

¹² Samuel Brownell, "Teaching the Child from the Disadvantaged Neighborhood," Journal of Teacher Education, XVI (June, 1965), 180-183.

attitude of accepting youth as they are, not as teachers might like them to be.

Rivlin¹³ accentuates the point that acceptance of disadvantaged youth is not enough. The teacher must also respect them.

Passow¹⁴ maintains that it does little good to belabor the teacher of the disadvantaged learner for having middle class socioeconomic group values. He believes that we must place emphasis on obtaining knowledge and understanding of the lower class socioeconomic culture, especially since it is this culture that collides with the culture of our present school system, creating the "cultural shock" experienced by many teachers.

Lohman suggests that the teacher must expect to be rejected by the disadvantaged student and be able to accept hostility without returning it.

She is an adult and can expect a little more of herself than a still maturing student. She must learn to live with frustration and not let it keep her from continued effort. She cannot expect results too soon, either in her own increased awareness of our culturally divergent children or in their reaction to her. She can demand certain standards of behavior; she cannot demand that children trust her or believe in her when they have had too much experience to the contrary.¹⁵

¹³Harry Rivlin, "Comments from the Guest Editors," Journal of Teacher Education, XVI (June, 1965), 183-186.

¹⁴Harry Passow, "Diminishing Teacher Prejudice," The Inner City Classroom: Teacher Behaviors, ed. by Robert Strom (Columbus, Ohio: Charles Merrill Books, Inc., 1966), p. 106.

¹⁵Joseph Lohman, Cultural Patterns in Urban Schools (Berkeley, California: University of California Press, 1967), p. 16.

Sexton¹⁶ holds the opinion that middle class socio-economic group culture, whatever its faults or virtues, differs substantially from lower class socio-economic group culture. Since youth from disadvantaged areas have difficulty adjusting to these cultural differences, educators must develop new ways of reaching them. Educators must formulate rules that are flexible and rewards that will stimulate interest in school.

Literature Describing Teacher Education Programs and Specific Instructional Approaches for Teaching the Educationally Disadvantaged Student

There has been little research to determine the type of programs that are most effective in preparing teachers to work with students in disadvantaged areas. Educators throughout the country have been concerned with the gap in teacher preparation and teacher readiness to teach disadvantaged children. As a result of this concern, educators have widely published their ideas about the direction to be taken to bridge the gap.

The work of the National Defense Education Act's Institute for Advanced Study in Teaching Disadvantaged Youth, supported by the United States Office of Education and administered by the American Association of Colleges for Teacher Education, has an important potential for contributing to knowledge concerning the means for improving programs for teachers of the disadvantaged. The program of the Institute operates on two levels:

¹⁶Patricia Sexton. Education and Income (New York: Viking Press, 1961), p. 79.

(1) Through frequent meetings of the Institute's National Steering Committee and Task Force, special attention is given to the identification and clarification of fundamental problems and issues relevant to teaching the disadvantaged learner and to the preparation of teachers of the disadvantaged learner. As a result, the National Committee proposes to recommend substantive changes and appropriate strategies for the improvement of teacher education.

(2) Through a series of interrelated projects, conferences, and other activities, opportunities are provided for educational personnel engaged in the teaching of the disadvantaged to exchange information regarding effective practice and materials, to develop their competencies as teachers, and to provide the National Committee with specific information concerning the problems and issues in the preparation and retraining of teachers.

The comprehensive approach of the National Institute seems to be leading toward solutions to problems identified with the preparation of teachers of the disadvantaged.

Another view of the recruitment, selection, and preparation of teachers of the disadvantaged is offered by Strom¹⁷ who states that high rates of staff turnover in slum schools in nearly every urban complex lend credence to the suggestion that a more adequate type of training is needed by those assigned to schools in disadvantaged areas. Slum schools present certain difficulties which

¹⁷Robert D. Strom, Teaching in the Slum School (Columbus, Ohio: Charles E. Merrill Books, Inc., 1965), p. 32.

require special training for the teacher. Yet, unlike the social worker and other members of the supportive staff who are trained in urban sociology, teachers often lack knowledge which might increase the relevance of instruction, the length of their tenure, and the degree of their satisfaction.

Strom further asserts that teacher training institutions purporting to equip candidates for positions in almost any type of environment must begin to provide more than cursory attention to the tasks that appear vital to successful teaching in poor neighborhoods. The responsibility of colleges and universities to develop carefully constructed programs for the training of teachers of the disadvantaged is not limited to urban universities, but includes all institutions where future teachers are being prepared. The population mobility in our nation includes its teachers.

Rivlin¹⁸ states that the prospective teacher should have courses in anthropology, sociology, and psychology as a part of his undergraduate program. These courses would present the student with an overall view of American education and problems centering on the urban school.

Hickerson¹⁹ proposes that teacher education programs should produce teachers who have had a thorough exposure to psychological, sociological, and anthropological theory and data concerning the effect of culture upon behavior and the relationships between race

¹⁸Harry Rivlin, "New Patterns for Urban Teacher Education," The Journal of Teacher Education, XVII (Summer, 1966), 177-184.

¹⁹Nathaniel Hickerson, Education for Alienation (New Jersey: Prentice-Hall, Inc., 1966), p. 21.

and intelligence.

Ornstein²⁰ writes that prospective teachers should receive an education geared to the type of school in which they are most likely to work. He believes all teacher-training programs should include a course that would help the prospective teacher understand the subculture of urban life and the youth who are a part of this subculture.

Two years later Ornstein²¹ proposes that inner city teachers and professors at the university level work as partners in developing a theory of teaching the disadvantaged learner which could become a part of a standard teacher education curriculum.

According to the Educational Policies Commission²², teacher education programs should include a study of the history and culture of all minority groups in the United States. This position is reaffirmed by Goldberg in her description of a successful teacher.

He knows something about the history, traditions, and social structures of the various ethnic groups, their unique culture patterns, their status in American society, the blocks and frustrations which they confront,²³ and their perceptions of what life has in store for them.

²⁰Allen Ornstein, "Learning to Teach the Disadvantaged," Journal of Secondary Education, XLI (May, 1966), 206-213.

²¹Allen Ornstein, "Theory as a Basic Guide for Teaching the Disadvantaged," Clearing House, XLII (March, 1968), 434-445.

²²Educational Policies Commission, Education and the Disadvantaged American, p. 17.

²³Goldberg, "Adapting Teacher Styles to Pupil Differences: Teachers for Disadvantaged Children," p. 168.

Frymier, speaking of strategies to reinforce learning, states that the individual teacher constitutes one aspect of strategy.

The powerful factor in education is the human element. What we have to learn to do is to trust ourselves and to use ourselves as the crucial, effective, powerful educative ingredient that we are. If we can find a way to use ourselves effectively, then we shall be able to make powerful dramatic changes in the lives and minds of the young people with whom we work.²⁴

Writing about reinforcement, Hawk²⁵ claims that it is the essential theory for prospective teachers of the culturally disadvantaged youth to master and put into practice, since it provides the major avenue through which these youth may be motivated to learn. He defends his claim with seven research studies completed since 1959 which support the hypotheses that the effectiveness of reinforcers differs from one social status group to another. For a middle class child a nonmaterial reward is as effective as a material incentive, but for a lower class child a material incentive is more effective and powerful.

According to the literature, various skills are thought to be essential to teachers, especially if they are to teach in depressed areas. It is generally agreed that language skills follow an order of listening, speaking, reading, and writing. Since the experience

²⁴Jack R. Frymier, "Strategies to Reinforce Learning," The Bulletin of the National Association of Secondary Principals, L (December, 1966), 92.

²⁵Travis Hawk, "A Neglected Aspect of Teacher Education for the Disadvantaged," The Journal of Teacher Education, XIV (Winter, 1968), 442-446.

of the disadvantaged child is low in each of these areas, teachers of these students need to be skillful in planning experiences that can be utilized to build student competencies in the language arts.

Because the disadvantaged child often develops what some writers have termed "learned inattention," Riessman²⁶ insists that the teacher must develop the auditory attention of the disadvantaged child. The teacher must have the proper skill to teach these youth how to listen and constantly check that they understand what they hear.

Gordon developed a detailed list of skills in the area of learning needed by teachers of the disadvantaged.

Children who are progressing at their expected rate need good teachers. Children who are not making it in the system--who are handicapped by intrinsic or extrinsic conditions---require exceptionally good teachers with special competencies. The skills to which I now refer are in the area of psycho-educational processes.

- a. Mastery of content that enables them to be excellent teachers of children as well as excellent teachers of their designated subject matter. The plea here is for excellence in basic preparation as a teacher with the scope of knowledge and the quality of interpersonal skills that this implies.
- b. Skill in the utilization of knowledge and experience in an infinite variety of ways to achieve maximal learning in children whose learning styles and learning strengths are known to vary extensively.
- c. Skill in relating knowledge of physical, mental, psychological, social, and educational status and of capacity and readiness for learning to the design of learning experiences and to the guidance of pupil development.

²⁶ Frank Riessman, The Culturally Deprived Child (New York: Harper and Row, 1962), p. 84.

- d. Skill in the application of the laws of learning to academic, emotional, and social learning situations.
- e. Skill in the utilization and development of materials and procedures leading to the use of appropriate aspects of the environment and in the use of oneself to influence and modify individual and group learning.
- f. Skill in the conceptualization of problems and in the use of logical steps in problem solving as prerequisites to continued growth as a scholar and as a professional worker.²⁷

Many educators are exploring team teaching as a possible approach to the problems of staffing and operating schools in urban areas serving large populations of disadvantaged learners. Fantini and Weinstein²⁸ designed a three-tiered model that describes the use of teacher talent in urban schools. In one sense, they support a variation of the traditional team approach in order to utilize most productively the talents and abilities of urban teachers.

In the three-tiered model, teachers would be assigned to tiers on the basis of their strengths and interests. In addition, people from the community would also be assigned to each of the tiers on the same basis. For example, Tier I would include technically-inclined and subject-oriented teachers. Parents in Tier I could serve as teacher aides. Tier II would include one-to-one and activities-oriented teachers and parents who show creativity and wide ranges of interest. Tier III would include more inductive, open-ended teaching and child-situation-oriented teachers and parents who

²⁷Edmund W. Gordon and Doxey A. Wilkerson, Compensatory Education for the Disadvantaged (New York: College Entrance Examination Board, 1966), pp. 29-30.

²⁸Mario Fantini and Gerald Weinstein, Making Urban Schools Work: Social Realities and the Urban School (New York: Holt, Rinehart, and Winston, Inc., 1968), pp. 45-46.

would collaborate with the community on social action projects and identity training.

A school program arranged in three-tiered fashion would be geared to meet the common needs of all students without sacrificing individuality or cultural diversity. Moreover, it would foster the kind of meaningful mental framework that is conducive to the learning of academic subject matter. Because this learning would be personally meaningful to the students, the ability to transfer ideas and principles acquired in one context to another context would be engendered in the school's products. By dividing the school schedule into these three segments rather than subject-matter segments per se, the educational process would be significantly more efficient in accomplishing its long-range aims. Indeed, only through innovative reorganization and reorientation can teacher education programs hope to meet America's need for the human resources which will revitalize and perpetuate the country as a healthy and self-renewing nation.

Fantini and Weinstein encourage educators to remain alert to national needs related to staffing and operating urban schools which serve large populations of disadvantaged learners.

Harry Rivlin²⁹ also explores the possibility of a teacher education program planned around the use of team teaching. He proposes a teacher education program that begins to employ the team approach in the junior year of college. During the junior year

²⁹Harry N. Rivlin, Teachers for Our Big City Schools (New York: Anti-Defamation League of B'nai Brith, n.d.), pp. 14-16.

the prospective teacher would spend the first semester working as a teacher aide in a large urban school. The second semester would be spent as a community service aide in the same urban school. In his senior year of college, the prospective teacher would be appointed an assistant teacher for a full year during which he would spend three hours per day performing clerical and instructional tasks. He would assume increasing teaching responsibility as the year progressed. The university would conduct seminars and classes for the assistant teachers during the entire senior year. After spending a year as an assistant teacher, the assistant teacher becomes an intern in a large urban school under the direction of a head teacher. During the intern year he has teaching responsibility for one-half the program of a full time teacher. He is also enrolled in seminars at the university that are planned for teacher interns. The intern receives credit for a full year's teaching experience for salary purposes.

That some young teachers are able to solve their problems and still maintain faith in themselves, in education, and in their students may be attributable to their inventiveness, adjustability, and idealism. No system of mass education can rely on such unusual success by unusual teachers. If the unusual is to become the usual, we will need to see the first years of teaching as a part of the process of learning to become a teacher.

Many colleges and school systems now recognize the importance of more adequately preparing urban teachers for their responsibilities. According to the results of a survey conducted recently by the

American Association of Colleges for Teacher Education, more than 200 institutions either conduct programs specifically designed to prepare teachers for urban schools or plan to introduce such programs.

Literature Dealing with Perceptions, Attitudes, and Academic Achievement of the Educationally Disadvantaged Student

Kaplan³⁰ did a study of 66 first grade pupils from three schools in Harlem, New York that demonstrated that while it was possible to train disadvantaged children to conserve numbers, the effects were not lasting. Kaplan concludes that only a "continuous dose" of training, as opposed to a "single dose," has a chance of bringing about the desired change in conservation responses. These findings support the conclusion reached in other studies and further validated by achievement test data from metropolitan school systems that there is a clear link between the disadvantaged environment and mathematical achievement.

Wagner³¹ reports a study that compared the written, oral, and construction responses of economically disadvantaged and advantaged sixth grade pupils in Bridgeport, Connecticut to science demonstrations. The study was basically designed to gain greater understanding of the academic performance of disadvantaged students in elementary school science. The advantaged and disadvantaged

³⁰Jerome D. Kaplan, "Teaching Number Conservation to Disadvantaged Children," Dissertation Abstracts, XXVIII (June, 1968), 3492B-3493B.

³¹Bartlett A. Wagner, "The Responses of Economically Advantaged and Economically Disadvantaged Sixth Grade Pupils to Science Demonstrations," Dissertation Abstracts, XXVIII (January, 1968) 3086A.

pupils differed significantly in their suitable written and oral response. There was, however, no significant difference in the construction response of the two groups. Disadvantaged students understand and can communicate their understanding of science concepts when placed in situations requiring limited verbal response. Wagner's findings also suggest that teachers might somewhat compensate for the restricted background of the disadvantaged pupil by utilizing instructional procedures that capitalize on individual pupil abilities.

Bernard Spodek³² in an issue of Theory into Practice devoted to pressures on children states that slum schools place a kind of pressure on students that tends to destroy initiative and limit achievement. Such books as Kohl's³³ 36 Children and Kozol's³⁴ Death at an Early Age describe how children are pressured by the urban system of education.

Pressure on the Negro child often takes the form of denying the child the worth of his group. The absence of books showing Negroes in a positive light, coupled with the presence of a multitude of educational material reflecting the white world, conveys to the black child the message that the white world is good while the black world is not even worthy of description. Often the overtly

³²Bernard Spodek, "Pressures on Young Children," Theory into Practice, VII (February, 1968), 14-16.

³³Herbert Kohl, 36 Children (New York: The New American Library, 1967).

³⁴Jonathan Kozol, Death at an Early Age (New York: Bantam Books, Inc., 1967).

and covertly prejudicial statements of teachers or other educational personnel place additional pressures on the Negro child. No amount of compensatory education can ever overcome the pressure which prevents a child from achieving.

In reporting research conducted through a project entitled "Science--A Process Approach," Walbesser and Carter³⁵ report an interest in the suitability of teaching materials for different socio-economic areas. This factor was taken into consideration when try-out centers for the project were selected.

Classes within these centers were divided into three levels by socio-economic background. The A group represented an advantaged student population with median parental income of \$20,000 and a median parental education of two years of college. The D group represented a disadvantaged student population with median parental income of \$3,500 and a median parental education of eight years of elementary education. The M group represented the middle 25 per cent parental income group of the student population sampled.

The hypothesis with which this investigation is concerned is the following: If behavioral objectives are stated, if instructional activities are written for guiding the teacher based upon the stated objectives, and if behavioral hierarchies are constructed from the stated objectives, then the acquisition of the stated objectives

³⁵Henry H. Walbesser and Heather L. Carter, "Acquisition of Elementary Science Behavior by Children of Disadvantaged Families," Educational Leadership, XXV (May, 1968), 743-747.

by the learners will be the same for all socio-economic groups.

Although the Walbesser and Carter data do support the hypothesis, it should be noted that the advantaged and middle income groups show greater percentage acquisition on a larger proportion of behaviors than does the disadvantaged group. The disadvantaged group is successful, however. Among this group, more children demonstrated acquisition of a larger percentage of behaviors in 14 of the 33 exercises in the "simple processes" than did children from the other two groups.

The data support the hypothesis that it is possible to create a set of instructional materials that can be successfully used with a wide range of the elementary school population. It appears that the levels of verbal ability influence the level of behavior acquisition within certain processes.

Allison Davis³⁶, an early pioneer among researchers on the problems of educating learners from low status families, addressed himself to the educability of the disadvantaged in a publication entitled The Unfinished Journey: Issues in American Education. Davis, who firmly believes in the potential of these learners, reports that the strongest evidence of the educability potential of Negro children from low status families has been afforded by studies of the significant increase in the IQ of Southern Negro children with each year of residence in Northern cities. This

³⁶Allison Davis, "The Educability of the Children of the Poor," in The Unfinished Journey: Issues in American Education, ed. by Dana Stockbridge (New York: John Day, Inc., 1968), pp. 78-83.

marked increase in linguistic and other academic skills must be attributed to (1) the greater economic and social opportunities for their parents after migrating to the North, and (2) the better teaching staffs, better equipment, higher per-pupil school appropriation, and the longer academic year. Longer training in better schools with more efficient teachers and more literate classmates has produced a measurable and significant rise in the average IQ of Southern Negro children.

Related research evidences that, given the better teaching, equipment, and longer school year in cities like New York, Chicago, and Philadelphia, Negro pupils who come from the South consistently improve in educational aptitude and skills, particularly language skills, the central skill of academic achievement. The average IQ for the nation is 100; the average IQ for Negroes in the cities referred to is 97. In another decade Davis hypothesizes that there will be no difference.

Literature Describing the Learning Difficulties of the Educationally Disadvantaged Student and the Origin and Effect of These Learning Difficulties

The vital importance of the parents and home environment in shaping the educational attitudes and behavior of the child is generally recognized. This recognition creates another important area of human relations for the teacher of the disadvantaged youth, that of close teacher-parent understanding and cooperation.

The influence of the home and family environment as primary agents of socialization makes a great impact upon the child.

Deutsch³⁷ indicates that a child's difficulties in school can be tied in with an intellectually impoverished home life. He emphasizes that a child's growth is due to a rich and variable range of intellectual stimulations.

Erickson³⁸ places great emphasis on the importance of the teacher's understanding of the influences of home, peers, and neighborhood as they affect the specific dialect spoken by each student.

Deshler³⁹ believes that the teacher must understand all the forces that play on the child outside of the school. This knowledge can aid in understanding the child's language and behavior patterns in school.

Edwards⁴⁰ believes that for the culturally deprived child even kindergarten and Head Start Programs are too late. She maintains that appropriate education must be given to every child as soon as he can benefit from it. For the deprived inner-city child or the poor rural child she concludes this age to be eighteen months.

³⁷Martin Deutsch, "The Disadvantaged Child and the Learning Process," in Education in Depressed Areas, ed. by Harry Passow (New York: Teachers College, Columbia University, 1963), pp. 163-180.

³⁸Maria Erickson, "Teaching and Teacher Education for Urban Disadvantaged Schools," Journal of Teacher Education, XVI (June, 1965), 148-149.

³⁹Betty Deshler, "Teaching and Teacher Education for Urban Disadvantaged Schools," Journal of Teacher Education, XVI (June, 1965), 156.

⁴⁰Esther Edwards, "Kindergarten Is Too Late," Saturday Review, June 15, 1968, pp. 68-79.

The only feasible answer at the present time to this apparent need is to educate the parents of these children. Most socially disadvantaged parents are eager for their children to succeed in school, yet they lack knowledge of the demands that school will place on their children, and they lack skills that can prepare their children for the transition from home to school.

Miller and Riessman⁴¹ point out that aspiration for a college diploma is rare even among the highly talented disadvantaged youth. He is not sure what he can do in today's society with a college diploma, and he fears the disruption of his familial, community, and peer group security.

Strom takes a strong position in favor of positive teacher-parent relations. He sees the problem between home and school to be centered in role misinterpretation and communication. Both the home and the school jealously guard certain functions while each assumes that different tasks are within the province of the other. He places responsibility for solving this problem upon school personnel.

Responsibilities incumbent upon teachers extend beyond developing the mind, talent, and person of their students and include offering guidance to the home in order that parents may reinforce and support educational programs. This involves sharing information with the home, organizing easy routes of⁴² communication, and interpreting societal expectations.

⁴¹S.M. Miller and Frank Riessman, "The Working Class Subculture: A New View," Social Problems, IX (1961), 92.

⁴²Robert Strom, Teaching in the Slum School (Columbus, Ohio: Charles Merrill Books, Inc., 1965), p. 20.

Almost every sizable program of remedial education now includes some effort to increase parental involvement. More and more schools serving disadvantaged neighborhoods have moved toward breaking down the barriers that have separated school and home. The traditional PTA is giving way to home visits by teachers, community aides, or social workers. In addition to keeping in touch through home visits, these programs now help to interpret the school programs to families, provide information about school events, suggest ways parents may assist the school program, counsel them about behavioral or school problems, or put them in contact with appropriate community assistance agencies. As a result of these contacts, there seems to be a proliferation of sociological studies which have probed racial differences, feminine and masculine roles, family relations, and models of affection and authority.

Significant among the findings of these studies is the existence of considerable differences between the child-rearing practices of middle class socio-economic families compared to the practices of lower class socio-economic families. In general, parental behavior proclaimed to be characteristic of the poor seems in sharp contrast to behavior which is presumed to be conducive to the development of good mental health in children. Thus many programs for parents of the disadvantaged now center around improving child-rearing practices.

Marans and Lourie⁴³ hypothesize that social action programs for the disadvantaged child are based on the conviction that life's early privations have long-range individual and social consequences. Cycles of deprivation are passed on from generation to generation within a large group of people who share many other characteristics over time. The "culture of poverty" exists within the lowest socio-economic group. There will be an increasing demand for the services of the behavioral scientist to develop new kinds of remedial and preventive programs for a large segment of our population, the lowest socio-economic group.

If education, involvement, and cooperation of parents with school programs can reduce negative child-rearing practices detrimental to the mental health of the disadvantaged youth, then certainly the school has an obligation to provide such programs. Bills states it in this way when speaking of the thesis of the 1967 Yearbook of the Association of Student Teaching.

It is the thesis of this yearbook that teachers are responsible for the personal and social development of their students and that these goals are neither in addition to nor in conflict with the goal of promoting superior achievement. In fact, teachers can achieve the goal of optimum intellectual development only if the goal encompasses concern for the mental health of students.⁴⁴

⁴³Allen E. Marans and Reginald Lourie, "Hypothesis Regarding the Effects of Child-Rearing Patterns on the Disadvantaged Child," in Disadvantaged Child, Vol. I, ed. by Jerome Hellmuth (New York: Brunner/Mazel, Inc., 1967), pp. 19-20.

⁴⁴Robert Bills, "The Classroom Teacher, Mental Health, and Learning," in Mental Health and Teacher Education, 1967 Yearbook of The Association of Student Teaching (Iowa: William Brown Co., Inc., 1967), p. 3.

Throughout this review of the literature the need for adequate preparation of the teacher of disadvantaged youth has been apparent. Only the teacher who has been prepared to meet the challenge of educating the youth of the inner city can and will open his students to the opportunity expressed a generation ago by Thomas Wolfe.

To every man his chance, to every man, regardless of his birth, his shining golden opportunity. To every man the right to live, to work, to be himself, and to become whatever thing his manhood and his vision can combine ~~to~~ make him. This . . . is the promise of America!

⁴⁵Hubert H. Humphrey, "Education--The Ideal and the Reality," in National Conference on Education of the Disadvantaged, A Report of a National Conference held in Washington, D.C.: United States Department of Health, Education, and Welfare, Office of Education, 1966, p. 59.

CHAPTER II

METHODOLOGY OF STUDY

Description of the Test

The author used The Urban Education Test on Teaching the Disadvantaged developed and validated by Jack R. Frymier and James B. Boyer in 1968. Frymier and Boyer used the test in 1968 to learn how much pre-service teachers know about teaching and learning in urban areas serving socially and economically disadvantaged learners. (The forty items used in the published form of the test are included in Appendix A.)

Boyer developed a conceptual framework for classifying the items in the test which the author also has included in her study. Boyer's conceptual framework provided a theoretical base from which to move in the analysis of original items. Items were categorized that identified understandings relating to specific aspects of teaching and learning.

Nature of the Study

The Urban Education Test on Teaching the Disadvantaged was designed for use with pre-service and in-service teachers. Boyer administered the test to 2,054 pre-service teachers in 1968 and recommended at the conclusion of his study that additional research might address itself to a comparison of pre-service teachers' knowledge of the disadvantaged learner with that of in-service

teachers' knowledge of the disadvantaged learner measured on the same instrument.⁴⁶

This study, then, compares pre-service and in-service teachers' knowledge of teaching and learning in urban areas serving socially and economically disadvantaged learners. The study also compares two groups of in-service teachers, those working in high socio-economic communities and those working in low socio-economic communities, to discover possible differences in their knowledge of teaching and learning in urban areas serving socially and economically disadvantaged learners.

Selection of Samples

Two of the forty school districts in a midwestern county were used as sample populations. Dr. Jack R. Frymier and Dr. I. Carl Candoli of the Ohio State University assisted the author in the selection of sample areas. These two districts were chosen for study because they represent two very distinct populations. Sample A is a district whose residents are from predominantly lower socio-economic levels. Sample B is a district whose residents come from predominantly high socio-economic levels.

Description of Sample Area A: A Low Socio-Economic Community

Population and Population Characteristics

The 1960 census reports the total population of Sample Area A as 38,063. The land area is three square miles with a population

⁴⁶Boyer, "A Study of the Cognitive Concepts Held By Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners," p. 168.

density of 12,688 people per square mile. The census figures indicate that Sample Area A decreased in population by eighteen per cent in the 1950-1960 period. Further census figures show that whites are leaving the city while the number of black is increasing.⁴⁷

Between 1950 and 1960, the percentage of non-whites rose from 8.6 per cent to 21.4 per cent. In 1960, 20.9 per cent of the population was black and 33.2 per cent of the population was either foreign-born or of mixed parentage. Eight years later, a 1968 student census indicated that 76 per cent of the students and 35 per cent of the instructional staff were Negro.⁴⁸

Education

In 1960 persons 25 years of age and over had completed a median of 10.4 years of school; 6.9 per cent had completed less than five years of school; and 38.2 per cent had completed high school or pursued higher education.

Income

The median annual family income in 1959 was \$5,696. The Office of Economic Opportunity of the United States Office of Health, Education, and Welfare considers those families to be poor that have an income of \$3600 per four persons in the family. Approximately

⁴⁷All census data taken from the 1967 County and City Data Book: A Statistical Abstract Supplement, U.S. Bureau of the Census (U.S. Government Printing Office, Washington, D.C.).

⁴⁸Statistical information other than census data is taken from Section One of the Model City Program for Sample Area A.

21 per cent of the population earned less than \$3,000, and 16.6 per cent earned more than \$10,000.

Socio-Economic Characteristics

There is a great deal of heavy manufacturing industry located in Sample Area A. While the city's economic base remains relatively healthy, poverty is nonetheless a way of life for nearly twenty per cent of its residents. Nearly ten per cent of the males and almost six per cent of the females in the labor force are unemployed. In 1968 approximately twenty per cent of the city's adult residents had less than an eighth grade education and were therefore seriously hampered in their attempts to achieve economic and social self-sufficiency. In addition, the city, as compared with the forty other communities in the same area, has the fourth highest case load in the Department of Social Welfare, the highest total public assistance load, and the highest number of families receiving surplus commodities. The crime rate in the city has climbed by more than a third in the past three years. The FBI reports that it has the highest crime rate of any city in the nation of comparable size.

School District

The school system of Sample Area A is composed of nine schools (five elementary schools, three middle schools, and one high school.) Since two of the schools are a part of a Model City Program, printed information describing the educational background and problems of the district was made available to the author.

Curriculum

As a part of the regular organizational structure, the primary schools are nongraded. Nongradedness takes into consideration that each child is different with respect to ability and speed of achievement. The curriculum in the middle schools consists in part of a specialized offering based on a number of units (about 26) of instruction, divided into five week segments. Course selection is determined for each student by the counselor. The middle school program also includes the "suite" concept, which allows teachers whose rooms are in close proximity to engage in daily cooperative planning.

The school system in Sample Area A operates many programs and projects designed to meet the special educational needs of the overall community and student body. Included among these are programs of job upgrading, family life education, cultural and educational experiences, group and individual counseling, student health services, pre-school educational experiences, occupational training and preparation, work experience, vocational rehabilitation, special assistance for the handicapped and the emotionally disturbed, parent education, outdoor educational experience, educational and social adjustment assistance for suspended students, special instructional materials services, art seminars, and teacher aide programs. Some of these programs are Federally aided.

Students

The student achievement in the schools located in the Model City area is somewhat below national norms, as judged by the results

of the California Achievement Test and the California Test of Mental Maturity.

Causes for Educational Problems

There are a number of causes for the educational problems found in Sample Area A. These include:

The transiency and mobility of the student population;

An influx of culturally and educationally deprived students;

High staff turnover;

The unpreparedness of new teachers from teacher training institutions where the needs of the educationally and culturally deprived child are not sufficiently identified or emphasized;

The alienation of the culturally and educationally deprived student from his school and his community;

The inability of some segments of the community to appreciate or understand the educational needs of the culturally and educationally deprived in their own community;

The apathetic feelings and attitudes on the part of the community people and the professionals toward the culturally and educationally deprived.

Perhaps the single most important general cause of the educational problems in Sample Area A is that the school system (teachers and administrators) has been increasingly unable or unwilling to provide the necessary and relevant educational challenges and opportunities to its students.

There are other factors that cause educational problems in Sample Area A. Self-concepts that define a person as inferior--

either in personal qualities or as a group member-- are antithetical to the essence of life in a democratic society. Great numbers of children in the Model Neighborhood schools, and particularly many Negro children, have such negative images of themselves. They feel that they are unable to learn; that they should not even entertain the hope of a rewarding life simply because of their skin color. This kind of "stunted" personality development is not only an evil in itself, but it poses a dramatic obstacle to learning as well.

Model City Program Approaches (in order of priority established by the Model City Task Force)

(1) Institute an in-service training program by outside professional consultants for all administrative, supervisory, and teaching personnel. This training program will be an ongoing device to assist teachers, supervisors, and administrators in improving their basic functions for the purpose of student motivation and stimulation as well as their abilities to cope with student problems.

(2) Fully integrate Afro-American history and culture into the school system.

(3) Strengthen and increase community involvement in all aspects of the educational program including the Community School Program by providing a greater decision-making role in the program for the community's residents and by initiating programs relevant to the needs and desires of the community and provided at a time when they can be used effectively.

(4) Continue to examine and evaluate the overall educational process in terms of administration, supervision, organization, personnel program, curriculum, facilities, and equipment with an eye toward developing the education components for the future years of the Model City Program.

(5) Significantly increase the role of para-professional in classroom management and student supervision by providing one para-professional for every teacher and administrator at ___ and ___ schools. These para-professionals will receive pre-placement and in-service training.

(6) Develop group guidance programs for 'action-prone' adolescents, by bringing together all the students at a particular grade level into randomly selected small groups where intensive guidance and supportive programs can be engaged in by all.

(7) Enhance the supportive role of the home in the educational process through visiting teacher and home tutorial programs.

Administration of Test Instrument in Sample Area A

On April 27, 1970, a call was placed to the Assistant Superintendent of Schools in Sample Area A. At this time a May 4th appointment was made for the author to meet with the Assistant Superintendent and the Director of Instruction to discuss the possibility of administering The Urban Education Test on Teaching the Disadvantaged to the teachers in their school district.

After a study of the instrument in question, the Assistant Superintendent and the Director of Instruction decided that all teachers in their system should participate in the testing program. Since two of their schools were located in the Model City neighborhood and were benefitting from in-service training and outside professional consultants, these administrators wished to see if such service affected teachers' knowledge of the disadvantaged learner. These men also felt that The Urban Education Test on Teaching the Disadvantaged could provide useful information for workshops, in-service courses, and teaching materials within their school system.

An in-service workshop day had been planned for all schools in Sample Area A for May 15th. Principals were told at a planning meeting that they could use an hour of their workshop time to administer the test on the in-service day. To promote teacher confidence and encourage honesty in answering test items, principals were directed to tell their staff that a representative of The Ohio State

University would gather their envelopes containing the test booklet, score sheet, and information sheet. Scoring and analysis of tests would be done at The Ohio State University. (Test instructions and information sheets that accompanied the tests are found in Appendix B.) Three of the nine schools participated in the program on the in-service day.

On May 15th a letter from the superintendent was sent to the principals of the six schools who did not participate in the testing program on the in-service day requesting that time be provided during the weeks of May 18th or May 25th when each of the teachers of their staff could complete the test. (A copy of this letter can be found in Appendix B.)

Test booklets, test instructions, and answer sheets were placed in envelopes for each teacher in each of the six schools and sent to the building principals through inter-school mail. Principals were instructed to mail the completed test envelopes to the Central Office where a representative of The Ohio State University would gather them.

Despite such an explicit statement from the superintendent, the high school principal refused to cooperate unless his teachers were paid for the time it would take them to complete the test items. In several schools, teachers cooperated but took offense at the nature of the test and expressed their feelings in notes and letters to The Ohio State University test evaluator. Particular hostility was directed to the request for information concerning the race of the respondent. Many teachers refused to identify their race.

Eight of the nine schools in the district participated in the testing program. Sixty-four per cent of the teachers in these schools responded.

Description of Sample Area B: A High Socio-Economic Community
Population and Population Characteristics

Geographically, Sample Area B is like two cities, even though the east end of the city and the west end were consolidated politically in 1929. There are still some 1800 acres of vacant land separating the east and west end.

The 1960 census reports the total population of Sample Area B as 112,007. The land area is twenty-four square miles, with a population density of 4,609 people per square mile. Census figures indicate that Sample Area B was a growing city between 1950 and 1960. The population increased 17.9 per cent during that decade. A preliminary 1970 census report indicates that the population remained constant between 1960 and 1970.

In 1960, 0.1 per cent of the population was non-white, the same percentage recorded in the 1950 census. Less than .05 per cent of the population was black, and 42.5 per cent of the population was either foreign born or of mixed parentage.

Education

Persons twenty-five years old and over in Sample Area B have completed a median of twelve school years; six per cent have completed less than five years of school; and fifty per cent have completed high school or pursued higher education.

Economic Conditions

The median family income in Sample Area B in 1959 was \$8,195. The lower 8.3 per cent earned less than \$3,000 while the upper 33.4 per cent earned over \$10,000.

The community has two orientations; it is both a residential and an industrial city. Essentially a home owners' community, over eighty-five per cent of the homes in Sample Area B are owner-occupied. Residents enjoy one of the highest per capita incomes of any comparable city in the United States. The city has no area which can be described as a slum.

Sample Area B has approximately 200 industries. The number of professional and clerical workers employed and settling in the city has increased, while the number of skilled, semi-skilled and unskilled workers employed has decreased. This decrease is due mainly to a decentralization of manufacturing in the major industry of the area.

School District

Since one of the objectives of the study was to compare knowledge of the disadvantaged learner between teachers working directly with the disadvantaged learner and teachers working with few or no disadvantaged learners, the decision was made to include all schools in the western end of Sample Area B. Sample Area B, then, represents one-half of the schools in the entire district

The school facilities and educational program in Sample Area B are recognized as one of the finest in the United States.

Sample Area B has thirteen schools (nine elementary schools,

three junior high schools, and one senior high school.)

Administration of Test Instrument in Sample Area B

The author established contact with the deputy superintendent of the school district on May 7, 1970. The superintendent in turn set up a May 13th appointment with the assistant superintendent in charge of instruction to discuss administration of the test. The assistant superintendent, who is also chairman of the Superintendent's Committee on Human Rights, felt that participation in such a testing program would provide information about the quality of in-service programs in the district and identify guidelines and activities for future in-service training programs.

On May 18th, memoranda were sent to principals, teachers, and human rights communication agents under the letterhead of the Superintendent's Committee on Human Rights. (See Appendix C for copies of these letters.) Principals were asked to distribute the test envelopes with attached information sheets to all teachers. Completed tests were returned in the same envelopes to the Division of Instruction office by May 26th.

Data Analysis

Variables

The following variables were considered in analyzing the data:

Sex. Male, female, and no response.

Race. All teachers in Sample Area A (high socio-economic population) are white. However, Sample Area B teachers (low socio-

economic population) are of several racial groups. These teachers were asked to identify their race. Teachers responded in three categories: black, white, and a sizable group who refused to identify their race.

Years of Teaching Experience. For purposes of analysis, years of teaching experience were divided into three groups: one to ten years of teaching experience, more than ten years of teaching experience, and no response.

Educational Background. Due to an oversight in planning, only the teachers in Sample Area B (high socio-economic area) were asked to cite their educational preparation. Three groupings emerged from Sample Area B. Group 1 contained all teachers with a bachelor's degree and Group 2 all teachers with a master's degree. Since only two teachers held the Ph.D degree, these teachers were placed in Group 2. Group 3 consisted of all the teachers who did not respond.

Teaching Level. Elementary, junior high, and senior high school. Since all tests were returned by the participating schools either through inter-school mail or were gathered at the schools by an Ohio State University representative, it was possible to eliminate the no response category.

Subject Matter Area. An arbitrary decision was made to consider only those subject matter areas where at least four teachers were represented. Thus several responses from each sample fell in no subject matter category. The subject matter areas included in the study were elementary comprehensive, reading specialist, special education, librarian, physical education, music, art, English,

mathematics, science, social studies, guidance-social work, foreign language, home economics, industrial arts, and commercial work.

Method of Analysis

To analyze the preceding variables, the mean and standard deviation of each variable were computed. Significant differences between means were tested using the t-test. An item analysis was performed to identify the number of correct responses to each item on the test.

Definition of Mathematical Terms. Definitions of the mathematical terms used in analysis of data are:

- a. Standard deviation. Standard deviation is the square root of the variance for a distribution and is an index of variability in the original measurement units.

$$s = \frac{\sqrt{\sum (X_i - M)^2}}{N}$$

- b. s. Standard deviation
- c. X_i. Raw score for each individual "i"
- d. M. Mean
- e. N. Number of observations
- f. Mean. The mean is the simple arithmetic average obtained by adding all the raw scores and dividing the sum by the number of observations, N.

$$M = \frac{\sum X_i}{N}$$

- g. t-test. t-test is a method of applying statistical inference to differences between means of samples representing two populations. The formula used for large sample distributions of differences between sample means is:

$$t = \frac{M_1 - M_2}{\sqrt{\frac{s_1^2}{N_1 - 1} + \frac{s_2^2}{N_2 - 1}}}$$

The formula used to determine whether the mean of the small sample was different from the mean of the entire sample is:

$$t = \frac{M - \mu}{s / \sqrt{N - 1}}$$

- h. μ . Mean of the entire district sample
- i. Level of significance. .05 (two-tailed test)
- j. Stepwise Regression Algorithm⁴⁹

Stepwise regression involves the iterative choice of the best available variables for inclusion in a multiple regression model. The stepwise regression algorithm:

- 1) Chooses the independent variable having the highest correlation with the dependent variable.
- 2) Creates a regression equation with this independent variable.
- 3) Chooses the remaining equation with this independent variable.
- 4) Enters that variable into the multiple regression equation.

⁴⁹William L. Henning, Jr., "An Economic Analysis of Savings and Income in Rural America" (unpublished Ph.D. dissertation, The Ohio State University, 1969), pp. 21-23.

- 5) Tests each independent variable in the regression equation for significance and removes any variable not meeting pre-set significance criterion.
- 6) Repeats steps three through five until any one of the following criteria is met.
 - a) A given number of independent variables has been included in the regression equation.
 - b) Inclusion of any one of the remaining independent variables will not reduce the total variation of the dependent variable by a given proportion.
 - c) All independent variables have been included in the regression equation.

k. Dummy variable⁵⁰

Dummy variables have possible values of one or zero corresponding respectively to a given situation or its absence; e.g., sex, zero is equivalent to male; one is equivalent to female. With the use of dummy variables, the assumption that an independent variable has a constant effect on the dependent variable, over the entire range of the independent variable, can be relaxed. One effect of using the dummy variable technique can be the substitution of several dummy variables for a single interval variable making a more accurate, but less compact, model.

⁵⁰ Henning, "An Economic Analysis of Savings and Income in Rural America," p. 23.

CHAPTER III

IN-SERVICE TEACHERS' KNOWLEDGE OF THE DISADVANTAGED LEARNER: LOW SOCIO-ECONOMIC SAMPLE (SAMPLE A)

Eight of the nine schools in the system participated in the testing program. As described in Chapter II, the high school did not participate in the study.

Sixty-four per cent of the teachers in these participating schools responded to the test. Table 1 summarizes teacher response by school for Sample Area A.

Analysis of Test Performance by Teacher Characteristics

Tables 3 through 8 present analyses of test performance by selected teacher characteristics. Analyses were made by:

- 1) sex;
- 2) race;
- 3) teaching level;
- 4) years of teaching experience; and
- 5) subject matter area.

Due to an oversight in planning, teachers in Sample A were not asked to define their educational background.

TABLE 1

SUMMARY OF TEACHER RESPONSE BY SCHOOL
SAMPLE AREA A

| School | Level | Total Teachers | Responding Teachers | Responding Teachers as Per Cent of Total |
|--------|------------|----------------|---------------------|------------------------------------------|
| A | Pre-School | 2 | 2 | 100 |
| B | Elem | 40 | 31 | 78 |
| C | Elem | 30 | 19 | 63 |
| D | Elem | 40 | 33 | 83 |
| E | Elem | 20 | 16 | 80 |
| F | Elem | 66 | 41 | 62 |
| G | Elem | 20 | 5* | 25 |
| H | Jr. High | 41 | 23 | 56 |
| I | Jr. High | 34 | 18 | 53 |
| Total | | 293 | 188 | 64 |

* Eleven additional teachers from this school returned their unanswered tests with notes reading to the effect, "I cannot answer these questions because I feel that your survey will stereotype the disadvantaged child."

CHAPTER III

IN-SERVICE TEACHERS' KNOWLEDGE OF THE DISADVANTAGED LEARNER: LOW SOCIO-ECONOMIC SAMPLE (SAMPLE A)

Eight of the nine schools in the system participated in the testing program. As described in Chapter II, the high school did not participate in the study.

Sixty-four per cent of the teachers in these participating schools responded to the test. Table 1 summarizes teacher response by school for Sample Area A.

Analysis of Test Performance by Teacher Characteristics

Tables 3 through 8 present analyses of test performance by selected teacher characteristics. Analyses were made by:

- 1) sex;
- 2) race;
- 3) teaching level;
- 4) years of teaching experience; and
- 5) subject matter area.

Due to an oversight in planning, teachers in Sample A were not asked to define their educational background.

TABLE 1

SUMMARY OF TEACHER RESPONSE BY SCHOOL
SAMPLE AREA A

| School | Level | Total Teachers | Responding Teachers | Responding Teachers as Per Cent of Total |
|--------|------------|----------------|---------------------|------------------------------------------|
| A | Pre-School | 2 | 2 | 100 |
| B | Elem | 40 | 31 | 78 |
| C | Elem | 30 | 19 | 63 |
| D | Elem | 40 | | 83 |
| E | Elem | | | 80 |
| F | Elem | | | 62 |
| G | Elem | | | 25 |
| H | Jr. High | | | 56 |
| I | Jr. High | | | 53 |
| Total | | 293 | | 64 |

* Eleven additional teachers from this school returned their unanswered tests with notes reading to the effect, "I cannot answer these questions because I feel that your survey will stereotype the disadvantaged child."

Table 2 summarizes the test results for the entire teacher sample in Area A.

TABLE 2
SUMMARY OF TEST PERFORMANCE
ENTIRE SAMPLE
LOW SOCIO-ECONOMIC AREA

| N | Mean | Standard Deviation | Range |
|------|-------|--------------------|-------|
| 188* | 19.54 | 6.46 | 6-34 |

* All respondents who answered ten or less items were eliminated.

Table 3 is a summary of the test results in Sample A by sex.

TABLE 3
SUMMARY OF TEST PERFORMANCE BY SEX
IN LOW-SOCIO ECONOMIC AREA

| Sex | N | Mean | Standard Deviation | Range |
|---------|-----|-------|--------------------|-------|
| Female | 125 | 19.82 | 6.48 | 6-34 |
| Male | 35 | 20.06 | 6.29 | 9-33 |
| Unknown | 28 | 17.61 | 6.43 | 6-30 |

No significant difference was found in the comparison between sexes.

Table 4 summarizes the test performance of Sample A by race.

TABLE 4
SUMMARY OF TEST PERFORMANCE BY RACE
LOW SOCIO-ECONOMIC AREA

| Race | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|-------------|----|-------|-----------------|-----------------------|-------|
| White | 87 | 21.57 | 4.08 | 6.18 | 6-34 |
| Black | 54 | 17.26 | | 5.95 | 6-32 |
| No response | 47 | 18.38 | 1.26 | 6.48 | 6-30 |

A comparison was made between the mean scores of white and black teachers using a t-test. The t-statistic for the difference between the means of the two groups was 4.08. This was significant at a level greater than .002.

A second comparison was made between the mean score of those who did not identify their race and the mean score of the entire sample. The t-statistic for the difference between the means of the two groups was 1.26. This is not a significant difference at the .05 level.

Table 5 is a summary of the test results in Sample A by years of teaching experience.

A comparison was made between the mean scores of those teachers with one to ten years of teaching experience and teachers with more than ten years of teaching experience. The t-value for the difference between the means of the two groups was -1.41. This was not significant at the .05 level.

TABLE 5

SUMMARY OF TEST PERFORMANCE
BY YEARS OF TEACHING EXPERIENCE
LOW SOCIO-ECONOMIC AREA

| Years of Experience | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|---------------------|-----|-------|-----------------|--------------------|-------|
| 1-10 years | 119 | 19.24 | -1.41 | 6.37 | 6-34 |
| More than 10 years | 45 | 20.84 | | 6.77 | 6-33 |
| Unknown | 24 | 18.54 | | 6.19 | 6-30 |

Table 6 summarizes the test performance in Sample A by teaching level.

TABLE 6

SUMMARY OF TEST PERFORMANCE BY TEACHING LEVEL
LOW SOCIO-ECONOMIC AREA

| Teaching Level | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|----------------|-----|-------|-----------------|--------------------|-------|
| Elementary | 142 | 18.80 | 2.8 | 6.49 | 6-34 |
| Junior high | 46 | 21.83 | | 5.84 | 10-31 |

Using a t-test, a comparison was made between the mean scores of elementary and junior high school teachers. The t-statistic for the difference between the means of the two groups was 2.8. This difference is significant at greater than the .01 level.

Table 7 is a summary of test results in Sample A by subject matter area.

TABLE 7
SUMMARY OF TEST PERFORMANCE BY SUBJECT MATTER AREA
LOW SOCIO-ECONOMIC AREA

| Subject Area | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|-----------------------------|-----|-------|-----------------|-----------------------|-------|
| Social Studies | 9 | 21.11 | | 5.99 | 17-29 |
| Science | 5 | 19.80 | | 7.12 | 10-30 |
| Mathematics | 6 | 24.33 | 2.80 | 4.66 | 18-28 |
| English | 4 | 21.50 | | 9.15 | 11-31 |
| Music and Art | 6 | 17.33 | | 6.25 | 11-24 |
| Physical Ed. | 5 | 15.40 | | 4.39 | 9-21 |
| Librarian | 4 | 23.00 | | 6.68 | 14-29 |
| Special Ed. | 7 | 24.86 | 2.55 | 6.07 | 17-34 |
| Reading Spec. | 4 | 23.00 | | 5.48 | 19-31 |
| Elementary Comprehensive | 115 | 18.62 | | 6.36 | 6-33 |
| Unknown | 17 | 20.12 | | 6.32 | 6-30 |
| Not included* | 6 | | | | |

* Less than four per subject matter area.

Significant differences were found only in the areas of mathematics and special education. The t-value for the difference between the mean of mathematics teachers and the mean of the entire sample was 2.80. This was a significant difference greater than the .05 level.

The t-value for the difference between the mean of special education teachers and the mean of the entire sample was 2.55. This was a significant difference at the .05 level.

Table 8 summarizes the test performance of science-mathematics teachers and humanities teachers in Sample A.

TABLE 8
SUMMARY OF TEST PERFORMANCE
OF SCIENCE-MATHEMATICS AND HUMANITIES TEACHERS
LOW SOCIO-ECONOMIC AREA

| | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|--------------|----|-------|-----------------|-----------------------|-------|
| Humanities | 20 | 20.40 | - .77 | 6.72 | 11-31 |
| Science-Math | 11 | 22.27 | | 5.98 | 10-30 |

The t-value for the difference between the means of science-mathematics teachers and humanities teachers was -.77. This was not significant at the .05 level.

Conceptual Framework Coding

The Conceptual Framework Coding in Table 9 refers to the areas of concentration related to teaching and learning identified as the basis for development of The Urban Education Test on Teaching the Disadvantaged. Each item was designed to reflect understanding of a particular concept considered useful in effective teaching. The areas which follow identify the code.⁵¹

⁵¹ Boyer, "A Study of the Cognitive Concepts Held by Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners," pp. 137-138.

| | |
|-----------------------------|---------------------------|
| A. Cultural Situation | 1. Language Development |
| B. Family Relationships | 2. Intelligence |
| C. Peer Influence | 3. Motivation |
| D. Curriculum | 4. Academic Achievement |
| E. Teacher Personality | 5. Personality Patterns |
| F. Methods and Organization | 6. Vocational Aspirations |

TABLE 9
ITEM ANALYSIS OF TEST PERFORMANCE
LOW SOCIO-ECONOMIC AREA

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|-----------------------------|------------------------|
| 1 | A-6 | 164 | .87 |
| 2 | B-3 | 126 | .67 |
| 3 | B-5 | 147 | .78 |
| 4 | C-1 | 66 | .35 |
| 5 | B-6 | 121 | .64 |
| 6 | A-2 | 123 | .65 |
| 7 | C-5 | 76 | .40 |
| 8 | B-3 | 105 | .56 |
| 9 | D-4 | 50 | .27 |
| 10 | B-4 | 122 | .65 |
| 11 | A-6 | 85 | .45 |
| 12 | C-2 | 68 | .35 |
| 13 | A-4 | 78 | .41 |
| 14 | A-5 | 120 | .64 |

TABLE 9--Continued

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|-----------------------------|------------------------|
| 15 | E-5 | 124 | .66 |
| 16 | E-4 | 138 | .73 |
| 17 | F-4 | 35 | .19 |
| 18 | D-5 | 84 | .45 |
| 19 | A-2 | 50 | .27 |
| 20 | D-3 | 122 | .65 |
| 21 | B-6 | 100 | .53 |
| 22 | B-2 | 74 | .39 |
| 23 | E-3 | 98 | .52 |
| 24 | A-4 | 38 | .20 |
| 25 | B-1 | 80 | .43 |
| 26 | F-4 | 53 | .28 |
| 27 | E-3 | 57 | .30 |
| 28 | F-3 | 106 | .56 |
| 29 | D-1 | 118 | .63 |
| 30 | C-3 | 102 | .54 |
| 31 | A-4 | 33 | .18 |
| 32 | A-4 | 141 | .75 |
| 33 | A-1 | 95 | .51 |
| 34 | E-6 | 91 | .48 |
| 35 | D-6 | 100 | .53 |
| 36 | B-6 | 67 | .35 |

TABLE 9--Continued

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|-----------------------------|------------------------|
| 37 | E-2 | 77 | .41 |
| 38 | A-5 | 81 | .43 |
| 39 | A-3 | 67 | .35 |
| 40 | A-3 | 91 | .48 |

Strengths in Specific Concepts

Any item with a relative difficulty index of .80 or above for all subjects (188) is designated as an area in which in-service teachers in low socio-economic area (Area A) hold considerable knowledge. The only concept about which Sample A teachers reflected such knowledge is:

Occasions on which parents in disadvantaged communities are likely to visit schools.

Weaknesses in Specific Concepts

Any item with a relative difficulty index of .40 or below is designated as an area in which in-service teachers in low socio-economic area (Area A) lack adequate knowledge. The following concepts were identified as areas of inadequate understanding.

- 1) Characteristics of minority group children who come from lower socio-economic levels affecting test performance.
- 2) Accurate concepts of social class.
- 3) Relationship of IQ and social class.

- 4) Difficulties the disadvantaged child experiences in speed-oriented tests.
- 5) Comparison of intelligence and verbal facility between rural and urban children.
- 6) IQ differences between children of lower class homes and middle class homes.
- 7) Reasons for over-age children being in elementary classrooms in disadvantaged schools.
- 8) Concepts of tests, test interpretation, and use.
- 9) Extent of non-teaching activities in many classrooms in the most depressed areas.
- 10) Reading achievement of Negro children in essentially segregated schools in the South.
- 11) Effects that deprivation of opportunities to respond to many varieties of stimuli has upon lower class children.
- 12) Income levels of Negro males compared to white males in the United States.

Multiple Regression Equation for Low Socio-Economic Area

$$Y = 23.22 - 3.03X_1 - 4.10X_2 - 3.33X_3$$

$$(\text{.99})^* \quad (1.01) \quad (1.06)$$

where Y = test score

$$X_1 = \begin{cases} 1 & \text{if an elementary teacher} \\ 0 & \text{if not an elementary teacher} \end{cases}$$

$$X_2 = \begin{cases} 1 & \text{if a black teacher} \\ 0 & \text{if not a black teacher} \end{cases}$$

$$X_3 = \begin{cases} 1 & \text{if no race is given} \\ 0 & \text{if race is given} \end{cases}$$

* standard error of regression coefficient

CHAPTER IV

IN-SERVICE TEACHERS' KNOWLEDGE OF THE DISADVANTAGED LEARNER HIGH SOCIO-ECONOMIC SAMPLE (SAMPLE B)

There are thirteen schools in Sample Area B. All thirteen schools participated in the testing program with sixty-four per cent of all teachers responding to the test. Table 10 summarizes teacher response by school for Sample Area B.

Analysis of Test Performance by Teacher Characteristics

Tables 12 through 18 present analyses of test performance by selected teacher characteristics. Analyses were made by:

- 1) sex;
- 2) teaching level;
- 3) educational background;
- 4) years of teaching experience; and
- 5) subject matter area.

Since all teachers in Sample B were white, an analysis by race would be trivial.

TABLE 10

SUMMARY OF TEACHER RESPONSE BY SCHOOL
SAMPLE AREA B

| School | Level | Total Teachers | Responding Teachers | Responding Teachers as Per Cent of Total |
|--------|----------|----------------|---------------------|------------------------------------------|
| A | Elem | 16 | 13 | 81 |
| B | Elem | 15 | 9 | 60 |
| C | Elem | 21 | 5 | 24 |
| D | Elem | 28 | 26 | 93 |
| E | Elem | 12 | 8 | 67 |
| F | Elem | 5 | 5 | 100 |
| G | Elem | 15 | 10 | 67 |
| H | Elem | 22 | 16 | 73 |
| I | Elem | 17 | 11 | 65 |
| J | Jr. High | 41 | 13 | 32 |
| K | Jr. High | 31 | 23 | 74 |
| L | Jr. High | 40 | 31 | 78 |
| M | Sr. High | 108 | 66 | 61 |
| Total | | 371 | 236 | 64 |

Table 11 summarizes the test results for the entire teacher sample in Area B.

TABLE 11
SUMMARY OF TEST PERFORMANCE
ENTIRE SAMPLE
HIGH SOCIO-ECONOMIC AREA

| N | Mean | Standard Deviation | Range |
|------|-------|--------------------|-------|
| 236* | 25.12 | 5.42 | 9-36 |

* All respondents who answered ten or less items were eliminated.

Table 12 is a summary of the test results in Sample B by sex.

TABLE 12
SUMMARY OF TEST PERFORMANCE BY SEX
IN HIGH SOCIO-ECONOMIC AREA

| Sex | N | Mean | Standard Deviation | Range |
|---------|-----|-------|--------------------|-------|
| Female | 138 | 25.44 | 4.89 | 10-35 |
| Male | 84 | 24.79 | 6.14 | 9-36 |
| Unknown | 14 | 24.00 | 5.88 | 13-35 |

No significant differences were found in comparing the mean scores by sex.

Table 13 summarizes the test performance of Sample B by years of teaching experience.

TABLE 13

SUMMARY OF TEST PERFORMANCE
BY YEARS OF TEACHING EXPERIENCE
HIGH SOCIO-ECONOMIC AREA

| Years of Experience | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|---------------------|-----|-------|-----------------|--------------------|-------|
| 1-10 years | 78 | 26.29 | 2.24 | 4.06 | 17-34 |
| More than 10 years | 135 | 24.56 | | 6.09 | 9-36 |
| Unknown | 23 | 24.48 | | 2.75 | 13-35 |

A comparison was made between the mean scores of those respondents with one to ten years of teaching experience and those with more than ten years of teaching experience. The t-value for the difference between the means of the two groups was 2.24. This was significant at greater than the .05 level.

Table 14 is a summary of test results of Sample B by teaching level.

TABLE 14
SUMMARY OF TEST PERFORMANCE BY TEACHING LEVEL
HIGH SOCIO-ECONOMIC AREA

| Teaching Level | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|----------------|-----|-------|-----------------|-----------------------|-------|
| Elementary | 107 | 24.23 | 1.85 | 4.92 | 10-35 |
| Junior high | 63 | 25.73 | | 5.42 | 9-36 |
| Senior high | 66 | 25.98 | 1.27 | 6.00 | 11-36 |

Using a t-test, a comparison was made between the mean scores of elementary and junior high school teachers. The t-statistic for the difference between the means of the two groups was 1.85. This difference was significant at approximately the .05 level.

A second comparison was made between the mean of senior high school teachers and the mean of the entire sample. The t-statistic for the difference between the means of the groups was 1.27. This difference was not significant at the .05 level.

Table 15 summarizes the test performance of Sample B by subject matter area.

TABLE 15
SUMMARY OF TEST PERFORMANCE BY SUBJECT MATTER AREA
HIGH SOCIO-ECONOMIC AREA

| Subject Area | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|-----------------------------|----|-------|-----------------|-----------------------|-------|
| Special Ed. | 6 | 26.83 | | 5.64 | 20-33 |
| Elementary Comprehensive | 96 | 23.95 | -2.1 | 4.90 | 10-35 |
| Librarian | 5 | 26.80 | | 1.64 | 25-29 |
| Physical Ed. | 10 | 22.90 | 1.23 | 4.79 | 16-33 |
| Music | 9 | 25.33 | | 5.00 | 19-32 |
| Art | 5 | 23.60 | | 6.43 | 14-32 |
| English | 20 | 26.60 | | 4.59 | 18-34 |
| Mathematics | 11 | 25.18 | | 6.90 | 17-36 |
| Science | 12 | 24.67 | | 4.48 | 16-32 |
| Social Studies | 18 | 28.72 | 3.66 | 4.31 | 21-36 |
| Guidance- Social Work | 8 | 29.63 | 2.25 | 8.02 | 11-35 |
| Foreign Language | 5 | 30.80 | 4.68 | 2.77 | 26-33 |
| Home Economics | 5 | 23.40 | | 4.04 | 19-28 |
| Industrial Arts | 4 | 17.00 | -2.55 | 8.83 | 12-29 |
| Commercial | 4 | 21.50 | | 4.80 | 16-36 |
| Unknown | 9 | 24.67 | | 5.52 | 14-31 |
| Not included* | 9 | | | | |

* Less than four per subject matter area.

Comparisons were made between the mean of the entire sample and the mean of the following subject matter areas: elementary comprehensive, social studies, physical education, guidance-social work, foreign language, and industrial arts. Table 16 indicates the subject matter area, t-value, and level of significance.

TABLE 16
SUMMARY OF t-VALUES AND LEVELS OF SIGNIFICANCE
BY SUBJECT MATTER AREA

| Subject area | Above or below mean score | + or - <u>t</u> -value | Level of significance |
|-----------------------------|------------------------------|---------------------------|--------------------------|
| Elementary Comprehensive | Below | - 2.1 | .05 |
| Social Studies | Above | + 3.66 | .002 |
| Physical Ed. | Below | - 1.23 | .50 |
| Guidance-Social Work | Above | + 2.25 | .10 |
| Foreign Language | Above | + 4.68 | .01 |
| Industrial Arts | Below | - 2.55 | .10 |

Table 17 summarizes the test performance of science-mathematics teachers and humanities teachers in Sample B.

TABLE 17
SUMMARY OF TEST PERFORMANCE
OF SCIENCE-MATHEMATICS AND HUMANITIES TEACHERS
HIGH SOCIO-ECONOMIC AREA

| | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|--------------|----|-------|-----------------|-----------------------|-------|
| Humanities | 61 | 27.21 | 1.86 | 4.81 | 14-36 |
| Science-Math | 23 | 24.91 | | 5.63 | 16-36 |

The t-value for the difference between the means of science-mathematics teachers and humanities teachers was 1.86. This was significant at approximately the .05 level.

Table 18 is a summary of the test results of Sample B by educational background.

TABLE 18
SUMMARY OF TEST PERFORMANCE BY EDUCATIONAL BACKGROUND
HIGH SOCIO-ECONOMIC AREA

| Educational Background | N | Mean | <u>t</u> -value | Standard Deviation | Range |
|---------------------------|-----|-------|-----------------|-----------------------|-------|
| Bachelor's Degree | 86 | 24.79 | | 4.78 | 10-34 |
| M.A. - Ph.D | 138 | 25.41 | | 5.72 | 9-36 |
| Unknown | 12 | 24.25 | | 6.36 | 13-35 |

No significant differences were found in a comparison of the means of these groups with one another or with the entire sample

Conceptual Framework Coding

The Conceptual Framework Coding in Table 19 refers to the areas of concentration related to teaching and learning identified as the basis for development of The Urban Education Test on Teaching the Disadvantaged. Each item was designed to reflect understanding of a particular concept considered useful in effective teaching. The areas which follow identify the code.⁵²

- | | |
|-----------------------------|---------------------------|
| A. Cultural Situation | 1. Language Development |
| B. Family Relationships | 2. Intelligence |
| C. Peer Influences | 3. Motivation |
| D. Curriculum Materials | 4. Academic Achievement |
| E. Teacher Personality | 5. Personality Patterns |
| F. Methods and Organization | 6. Vocational Aspirations |

TABLE 19

ITEM ANALYSIS OF TEST PERFORMANCE HIGH SOCIO-ECONOMIC AREA

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|-----------------------------|--------------------------|---------------------|
| 1 | A-6 | 215 | .91 |
| 2 | B-3 | 202 | .86 |

⁵²Boyer, "A Study of the Cognitive Concepts Held by Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners."

TABLE 19--Continued

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|-----------------------------|------------------------|
| 3 | B-5 | 212 | .90 |
| 4 | C-1 | 133 | .56 |
| 5 | B-6 | 157 | .67 |
| 6 | A-2 | 174 | .74 |
| 7 | C-5 | 163 | .69 |
| 8 | B-3 | 150 | .64 |
| 9 | D-4 | 105 | .44 |
| 10 | B-4 | 175 | .74 |
| 11 | A-6 | 161 | .68 |
| 12 | C-2 | 99 | .42 |
| 13 | A-4 | 117 | .50 |
| 14 | A-5 | 208 | .88 |
| 15 | E-5 | 185 | .78 |
| 16 | E-4 | 196 | .83 |
| 17 | F-4 | 99 | .42 |
| 18 | D-5 | 148 | .63 |
| 19 | A-2 | 54 | .23 |
| 20 | D-3 | 147 | .62 |
| 21 | B-6 | 161 | .68 |
| 22 | B-2 | 137 | .58 |
| 23 | E-3 | 141 | .60 |
| 24 | A-4 | 75 | .32 |

TABLE 19--Continued

| Test Item | Conceptual Framework Coding | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|-----------------------------|------------------------|
| 25 | B-1 | 144 | .61 |
| 26 | F-4 | 116 | .49 |
| 27 | E-3 | 81 | .34 |
| 28 | F-3 | 183 | .78 |
| 29 | D-1 | 191 | .81 |
| 30 | C-3 | 189 | .80 |
| 31 | A-4 | 81 | .34 |
| 32 | A-4 | 221 | .94 |
| 33 | A-1 | 135 | .57 |
| 34 | E-6 | 123 | .52 |
| 35 | D-6 | 146 | .61 |
| 36 | B-6 | 134 | .57 |
| 37 | E-2 | 151 | .64 |
| 38 | A-5 | 120 | .51 |
| 39 | A-3 | 118 | .50 |
| 40 | A-3 | 182 | .77 |

Strengths in Specific Concepts

Any item with a relative difficulty index of .80 or above for all subjects (236) is designated as an area in which in-service teachers in high socio-economic area (Area B) hold considerable knowledge. The concepts in which they reflected such knowledge are:

- 1) Occasions on which parents in disadvantaged communities are likely to visit schools.
- 2) Extent of intellectual activity characterizing homes of the disadvantaged.
- 3) Reasons for existence of the extended family in disadvantaged communities.
- 4) Matriarchal characteristic of lower class Negro family life.
- 5) Most essential factors for the successful education of lower class children.
- 6) Magnitude of child's out-of-school experience.
- 7) The problem of motivation of lower class youth.
- 8) Truancy rates and achievement levels in schools serving disadvantaged learners.

Weaknesses in Specific Concepts

Any item with a relative difficulty index of .40 or below is designated as an area in which in-service teachers in high socio-economic area (Area B) lack adequate knowledge. The concepts in which they reflected inadequate knowledge are:

- 1) Comparison of intelligence and verbal facility between rural and urban children.
- 2) Reasons for over-age children in elementary classrooms in disadvantaged schools.
- 3) Extent of non-teaching activities in many classrooms in disadvantaged schools.

4) Reading achievement of Negro children in essentially segregated schools in the South.

Multiple Regression Equation for High Socio-Economic Area

$$Y = 26.11 - 1.67X_1 - .08X_2$$

$$(.68)^* \quad (.03)$$

where Y = test score

$$X_1 = \begin{cases} 1 & \text{if an elementary teacher} \\ 0 & \text{if not an elementary teacher} \end{cases}$$

$$X_2 = \begin{cases} 1 & \text{if teacher is experienced} \\ 0 & \text{if teacher is not experienced} \end{cases}$$

* standard error of regression coefficient

The above equation is statistically significant but not operationally practical. To say, for example, that one teacher is an expected 2.0 points higher or lower than another is not operationally meaningful.

CHAPTER V

SUMMARY OF TEST PERFORMANCE: IN-SERVICE TEACHERS FROM HIGH SOCIO-ECONOMIC AREA, IN-SERVICE TEACHERS FROM LOW SOCIO-ECONOMIC AREA, AND PRE-SERVICE TEACHERS

In 1968 James B. Boyer administered The Urban Education Test on Teaching the Disadvantaged to 2,054 pre-service teachers in various colleges and universities across the country.⁵³ Table 20 compares the results of Boyer's testing program with the results of the in-service testing program in Sample Area A (low socio-economic area) and Sample Area B (high socio-economic area).

TABLE 20

SUMMARY OF TEST PERFORMANCE OF ENTIRE SAMPLES: IN-SERVICE TEACHERS FROM HIGH SOCIO-ECONOMIC AREA, IN-SERVICE TEACHERS FROM LOW SOCIO-ECONOMIC AREA, AND PRE-SERVICE TEACHERS

| Sample | N | Mean | t-value | Standard Deviation | Range |
|---------------------------|-------|-------|---------|-----------------------|-------|
| Pre-Service | 2,054 | 23.24 | -5.27 | 5.17 | 4-37 |
| In-Service A ^a | 188 | 19.54 | | 6.46 | 6-34 |
| In-Service B ^b | 236 | 25.12 | | 5.42 | 9-36 |

^aLow socio-economic area sample

^bHigh socio-economic area sample

⁵³Boyer, "A Study of the Cognitive Concepts Held by Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners," p. 133.

A comparison was made between the mean score of in-service teachers from a high socio-economic population (Sample B) and the mean score of pre-service teachers. The t-value for the difference between the means of the two groups was - 5.26. This difference is significant at greater than the .002 level.

A second comparison was made between the means of in-service teachers from a low socio-economic area (Sample A) and pre-service teachers. The t-value for the difference between the means of the groups was 9.18. This difference is significant at greater than the .002 level.

A final comparison was made between the mean scores of in-service teachers from a high socio-economic area (Sample B) and in-service teachers from a low socio-economic area (Sample A). The t-value for the difference between the mean scores of the two groups was 9.67. This is significant at greater than the .002 level.

Table 21 summarizes the test performance by sex of in-service teachers from the high socio-economic area sample, in-service teachers from the low socio-economic sample, and pre-service teachers.

TABLE 21

SUMMARY OF TEST PERFORMANCE BY SEX: IN-SERVICE TEACHERS FROM HIGH SOCIO-ECONOMIC AREA, IN-SERVICE TEACHERS FROM LOW SOCIO-ECONOMIC AREA, AND PRE-SERVICE TEACHERS

| Sex | Sample | N | Mean | Standard Deviation | Range |
|---------|-----------------------|-------|-------|-----------------------|-------|
| Male | Pre-Service | 534 | 22.10 | 5.23 | 4-34 |
| | Sample A ^a | 35 | 20.06 | 6.29 | 9-33 |
| | Sample B ^b | 84 | 24.69 | 6.14 | 9-36 |
| Female | Pre-Service | 1,376 | 23.77 | 5.07 | 6-37 |
| | Sample A | 125 | 19.82 | 6.48 | 6-34 |
| | Sample B | 138 | 25.44 | 4.89 | 10-35 |
| Unknown | Pre-Service | 144 | 23.41 | 5.20 | 10-34 |
| | Sample A | 28 | 17.61 | 6.43 | 6-30 |
| | Sample B | 14 | 24.00 | 5.88 | 13-35 |

^aLow socio economic area sample

^bHigh socio economic area sample

Since Boyer's study did not analyze the test performance of pre-service teachers by race, Table 22 will compare the data from the two in-service teacher samples only.

TABLE 22

SUMMARY OF TEST PERFORMANCE BY RACE: IN-SERVICE TEACHERS
FROM HIGH SOCIO-ECONOMIC AREA AND IN-SERVICE
TEACHERS FROM LOW SOCIO-ECONOMIC AREA

| Race | Sample | N | Mean | Standard Deviation | Range |
|---------|-----------------------|-----|-------|-----------------------|-------|
| White | Sample A ^a | 236 | 25.12 | 5.42 | 9-36 |
| | Sample B ^b | 87 | 21.57 | 6.18 | 6-34 |
| Black | Sample A | 0 | - - - | - - - | - - - |
| | Sample B | 54 | 17.26 | 5.95 | 6-32 |
| Unknown | Sample A | 0 | - - - | - - - | - - - |
| | Sample B | 47 | 18.38 | 6.48 | 6-30 |

^aLow socio-economic area sample

^bHigh socio-economic area sample

Table 23 is a summary of the test performance by teaching level of in-service teachers from Sample A (low socio-economic area) and in-service teachers from Sample B (high socio-economic area).

TABLE 23

SUMMARY OF TEST PERFORMANCE BY TEACHING LEVEL: IN-SERVICE
TEACHERS FROM HIGH SOCIO-ECONOMIC AREA AND IN-SERVICE
TEACHERS FROM LOW SOCIO-ECONOMIC AREA

| Level | Sample | N | Mean | Standard Deviation | Range |
|-------------|-----------------------|-----|-------|-----------------------|-------|
| Elementary | Sample A ^a | 142 | 18.80 | 6.49 | 6-34 |
| | Sample B ^b | 107 | 24.23 | 4.92 | 10-35 |
| Junior High | Sample A | 46 | 21.83 | 5.84 | 10-31 |
| | Sample B | 63 | 25.73 | 5.42 | 9-36 |
| Senior High | Sample A | 0 | - - - | - - - | - - - |
| | Sample B | 66 | 25.98 | 6.00 | 11-36 |

^aLow socio-economic area sample

^bHigh socio-economic area sample

Table 24 summarizes the test performance by number of years of teaching experience of in-service teachers from the low socio-economic area (Sample A) and in-service teachers from the high socio-economic area (Sample B).

TABLE 24

SUMMARY OF TEST PERFORMANCE BY YEARS OF TEACHING EXPERIENCE:
IN-SERVICE TEACHERS FROM HIGH SOCIO-ECONOMIC AREA AND
IN-SERVICE TEACHERS FROM LOW SOCIO-ECONOMIC AREA

| Years of Teaching Experience | Sample | N | Mean | Standard Deviation | Range |
|------------------------------|-----------------------|-----|-------|--------------------|-------|
| 1-10 years | Sample A ^a | 119 | 19.24 | 6.37 | 6-34 |
| | Sample B ^b | 78 | 26.29 | 4.06 | 17-34 |
| More than 10 years | Sample A | 45 | 20.84 | 6.77 | 6-33 |
| | Sample B | 137 | 24.56 | 6.09 | 9-36 |
| Unknown | Sample A | 24 | 18.54 | 6.19 | 6-30 |
| | Sample B | 23 | 24.48 | 2.75 | 13-35 |

^aLow socio-economic area sample

^bHigh socio-economic area sample

Table 25 summarizes the test performance by the subject matter area taught of in-service teachers from Sample A (low socio-economic area) and in-service teachers from Sample B (high socio-economic area).

TABLE 25

SUMMARY OF TEST PERFORMANCE BY SUBJECT MATTER AREA: IN-SERVICE
TEACHERS FROM HIGH SOCIO-ECONOMIC AREA AND IN-SERVICE
TEACHERS FROM LOW SOCIO-ECONOMIC AREA

| Subject Area ^a | Sample | N | Mean | Standard Deviation | Range |
|---------------------------|----------------|----|-------|-----------------------|-------|
| Social Studies | A ^b | 9 | 21.11 | 5.99 | 17-29 |
| | B ^c | 18 | 28.72 | 4.31 | 21-36 |
| Science | A | 5 | 19.80 | 7.12 | 10-30 |
| | B | 12 | 24.67 | 4.48 | 16-32 |
| Mathematics | A | 6 | 24.33 | 4.66 | 18-28 |
| | B | 11 | 25.18 | 6.90 | 17-36 |
| English | A | 4 | 21.50 | 9.15 | 11-31 |
| | B | 20 | 26.60 | 4.59 | 18-34 |

^aAt least four teachers represented in both samples. For subject areas not shown, see Chapter III, p. 54, and Chapter IV, p. 65.

^bLow socio-economic area sample

^cHigh socio-economic area sample

TABLE 25--Continued

| Subject Area | Sample | N | Mean | Standard Deviation | Range |
|-----------------------------|--------|-----|-------|-----------------------|-------|
| Music | A | 6 | 17.33 | 6.25 | 11-24 |
| | B | 9 | 25.33 | 5.00 | 19-32 |
| Physical Ed. | A | 5 | 15.40 | 4.39 | 9-21 |
| | B | 10 | 22.90 | 4.79 | 16-33 |
| Librarian | A | 4 | 23.00 | 6.68 | 14-29 |
| | B | 5 | 26.80 | 1.64 | 25-29 |
| Special Ed. | A | 7 | 24.86 | 6.07 | 17-34 |
| | B | 6 | 26.83 | 5.64 | 20-33 |
| Elementary Comprehensive | A | 115 | 18.62 | 6.36 | 6-33 |
| | B | 96 | 23.95 | 4.90 | 10-35 |
| Unknown | A | 17 | 20.12 | 6.32 | 6-30 |
| | B | 9 | 24.67 | 5.52 | 14-31 |

Table 26 is an item analysis of the test performance of in-service teachers from a high socio-economic area, in-service teachers from a low socio-economic area, and pre-service teachers.

TABLE 26

ITEM ANALYSIS OF TEST PERFORMANCE: IN-SERVICE TEACHERS FROM HIGH SOCIO-ECONOMIC AREA, IN-SERVICE TEACHERS FROM LOW SOCIO-ECONOMIC AREA, AND PRE-SERVICE TEACHERS

| Test Item | Sample | No. of Correct Responses | Relative Difficulty |
|-----------|--------------------------------|--------------------------|---------------------|
| 1 | Pre-Service | 1815 | .88 |
| | In-Service (Low) ^a | 164 | .87 |
| | In-Service (High) ^b | 215 | .91 |
| 2 | Pre-Service | 1705 | .83 |
| | In-Service (Low) | 126 | .67 |
| | In-Service (High) | 202 | .86 |
| 3 | Pre-Service | 1709 | .83 |
| | In-Service (Low) | 147 | .78 |
| | In-Service (High) | 212 | .90 |
| 4 | Pre-Service | 1329 | .65 |
| | In-Service (Low) | 66 | .35 |
| | In-Service (High) | 133 | .56 |
| 5 | Pre-Service | 1232 | .60 |
| | In-Service (Low) | 121 | .64 |
| | In-Service (High) | 157 | .67 |
| 6 | Pre-Service | 1374 | .67 |
| | In-Service (Low) | 123 | .65 |
| | In-Service (High) | 174 | .74 |

^aLow socio-economic area teacher sample

^bHigh socio-economic area teacher sample

TABLE 26--Continued

| Test Item | Sample | No. of Correct Responses | Relative Difficulty |
|-----------|-------------------|--------------------------|---------------------|
| 7 | Pre-Service | 1383 | .67 |
| | In-Service (Low) | 76 | .40 |
| | In-Service (High) | 163 | .69 |
| 8 | Pre-Service | 1269 | .62 |
| | In-Service (Low) | 105 | .56 |
| | In-Service (High) | 150 | .64 |
| 9 | Pre-Service | 773 | .38 |
| | In-Service (Low) | 50 | .27 |
| | In-Service (High) | 105 | .44 |
| 10 | Pre-Service | 1105 | .54 |
| | In-Service (Low) | 122 | .65 |
| | In-Service (High) | 175 | .74 |
| 11 | Pre-Service | 1031 | .50 |
| | In-Service (Low) | 85 | .45 |
| | In-Service (High) | 161 | .68 |
| 12 | Pre-Service | 892 | .43 |
| | In-Service (Low) | 68 | .35 |
| | In-Service (High) | 99 | .42 |
| 13 | Pre-Service | 986 | .48 |
| | In-Service (Low) | 78 | .41 |
| | In-Service (High) | 117 | .50 |
| 14 | Pre-Service | 1660 | .81 |
| | In-Service (Low) | 120 | .64 |
| | In-Service (High) | 208 | .88 |
| 15 | Pre-Service | 1598 | .78 |
| | In-Service (Low) | 124 | .66 |
| | In-Service (High) | 185 | .78 |

TABLE 26--Continued

| Test Item | Sample | No. of Correct Responses | Relative Difficulty |
|-----------|-------------------|--------------------------|---------------------|
| 16 | Pre-Service | 1481 | .72 |
| | In-Service (Low) | 138 | .73 |
| | In-Service (High) | 196 | .83 |
| 17 | Pre-Service | 1042 | .51 |
| | In-Service (Low) | 35 | .19 |
| | In-Service (High) | 99 | .42 |
| 18 | Pre-Service | 935 | .46 |
| | In-Service (Low) | 84 | .45 |
| | In-Service (High) | 148 | .63 |
| 19 | Pre-Service | 638 | .31 |
| | In-Service (Low) | 50 | .27 |
| | In-Service (High) | 54 | .23 |
| 20 | Pre-Service | 1053 | .51 |
| | In-Service (Low) | 122 | .65 |
| | In-Service (High) | 147 | .62 |
| 21 | Pre-Service | 934 | .45 |
| | In-Service (Low) | 100 | .53 |
| | In-Service (High) | 161 | .68 |
| 22 | Pre-Service | 1187 | .58 |
| | In-Service (Low) | 74 | .39 |
| | In-Service (High) | 137 | .58 |
| 23 | Pre-Service | 1219 | .59 |
| | In-Service (Low) | 98 | .52 |
| | In-Service (High) | 141 | .60 |
| 24 | Pre-Service | 825 | .40 |
| | In-Service (Low) | 38 | .20 |
| | In-Service (High) | 75 | .32 |

TABLE 26--Continued

| Test Item | Sample | No. of Correct Responses | Relative Difficulty |
|-----------|-------------------|--------------------------|---------------------|
| 25 | Pre-Service | 1315 | .64 |
| | In-Service (Low) | 80 | .43 |
| | In-Service (High) | 144 | .61 |
| 26 | Pre-Service | 728 | .35 |
| | In-Service (Low) | 53 | .28 |
| | In-Service (High) | 116 | .49 |
| 27 | Pre-Service | 830 | .40 |
| | In-Service (Low) | 57 | .30 |
| | In-Service (High) | 81 | .34 |
| 28 | Pre-Service | 1358 | .66 |
| | In-Service (Low) | 106 | .56 |
| | In-Service (High) | 183 | .78 |
| 29 | Pre-Service | 1499 | .73 |
| | In-Service (Low) | 118 | .63 |
| | In-Service (High) | 191 | .81 |
| 30 | Pre-Service | 1493 | .73 |
| | In-Service (Low) | 102 | .54 |
| | In-Service (High) | 189 | .80 |
| 31 | Pre-Service | 759 | .37 |
| | In-Service (Low) | 33 | .18 |
| | In-Service (High) | 81 | .34 |
| 32 | Pre-Service | 1826 | .89 |
| | In-Service (Low) | 141 | .75 |
| | In-Service (High) | 221 | .94 |
| 33 | Pre-Service | 1301 | .63 |
| | In-Service (Low) | 95 | .51 |
| | In-Service (High) | 135 | .57 |

TABLE 26--Continued

| Test Item | Sample | No. of Correct Responses | Relative Difficulty |
|-----------|-------------------|--------------------------|---------------------|
| 34 | Pre-Service | 955 | .47 |
| | In-Service (Low) | 91 | .48 |
| | In-Service (High) | 123 | .52 |
| 35 | Pre-Service | 1156 | .56 |
| | In-Service (Low) | 100 | .53 |
| | In-Service (High) | 146 | .61 |
| 36 | Pre-Service | 935 | .46 |
| | In-Service (Low) | 67 | .35 |
| | In-Service (High) | 134 | .57 |
| 37 | Pre-Service | 1186 | .58 |
| | In-Service (Low) | 77 | .41 |
| | In-Service (High) | 151 | .64 |
| 38 | Pre-Service | 881 | .43 |
| | In-Service (Low) | 81 | .43 |
| | In-Service (High) | 120 | .51 |
| 39 | Pre-Service | 869 | .42 |
| | In-Service (Low) | 67 | .35 |
| | In-Service (High) | 118 | .50 |
| 40 | Pre-Service | 1442 | .70 |
| | In-Service (Low) | 91 | .48 |
| | In-Service (High) | 182 | .77 |

Multiple Regression Equation for In-Service Teachers

$$Y = 24.61 - 2.65X_1 - 4.07X_2 - 2.64X_3 + 1.37X_4 - 2.78X_5$$

(.607)* (.952) (1.04) (.615) (.717)

where Y = test score

$X_1 =$ 1 if an elementary teacher
0 if not an elementary teacher

$X_2 =$ 1 if a black teacher
0 if not a black teacher

$X_3 =$ 1 if no race is given
0 if race is given

$X_4 =$ 1 if a female teacher
0 if not a female teacher

$X_5 =$ 1 if a teacher from Sample A (low socio-economic
0 if not a teacher from Sample A area)

*standard error of regression coefficient

Inter-sample comparisons by respondent characteristics cannot be made since the t-test as performed in Tables 21 through 25 indicate that the three populations are disjoint.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The purpose of this study was to determine how much in-service teachers in both high and low socio-economic school districts know about the economically and socially disadvantaged learner. The instrument used to test teachers' knowledge of the disadvantaged learner was the Boyer-Frymier test, The Urban Education Test on Teaching the Disadvantaged Learner.

Eight hypotheses were generated in the introductory chapter. Each hypothesis will be examined in view of the findings.

Hypothesis 1. There is no significant difference in knowledge of the disadvantaged learner between teachers in high socio-economic communities and low socio-economic communities.

The null hypothesis was rejected because of a significant difference between the mean scores of the two groups. In-service teachers in high socio-economic communities have more knowledge of the disadvantaged learner than in-service teachers in low socio-economic communities. The difference between the mean scores of the groups was significant at the .002 level.

Analyses of the remaining hypotheses may help to clarify the reasons for the significant difference in mean scores of the two samples.

Hypothesis 2. There is no significant difference in knowledge of the disadvantaged learner between male and female teachers.

There was no statistically significant difference between the mean scores of male and female teachers in the samples tested: pre-service teachers, in-service teachers from high socio-economic communities, and in-service teachers from low socio-economic communities.

Hypothesis 3. There is no significant difference in knowledge of the disadvantaged learner between pre-service teachers and in-service teachers in either high or low socio-economic communities.

Pre-service teachers have less knowledge of the disadvantaged learner than in-service teachers from the high socio-economic area sample. The difference between the mean scores of the groups was significant at greater than the .002 level.

Pre-service teachers have more knowledge of the disadvantaged learner than in-service teachers in the low socio-economic sample area. The difference between the mean scores of the groups was significant at greater than the .002 level.

It should be noted that the pre-service teacher sample may be a conglomerate of high and low socio-economic backgrounds. The only information available concerning teachers in this sample was their sex and the university which they attended. All pre-service teachers tested were fourth year undergraduate students.

It is presumed that the majority of the students came from middle to high socio-economic backgrounds rather than low socio-economic backgrounds.

Hypothesis 4. There is no significant difference in knowledge of the disadvantaged learner between black and white teachers.

Black teachers in the low socio-economic area knew significantly less about the disadvantaged learner than the white teacher.⁵⁴ The mean score of black teachers compared with the mean score of white teachers was significant at greater than the .002 level.

The author had speculated that more of the black teachers had come from lower socio-economic backgrounds than the white teachers in the sample and, therefore, would demonstrate greater knowledge of the disadvantaged learner. In discussion with teacher education authorities, however, it was seen that the majority of black students enrolled in colleges and universities do not come from low socio-economic backgrounds and should not be expected to demonstrate a greater knowledge of the disadvantaged learner than white teachers of similar socio-economic background.

The knowledge difference between black and white teachers may be traced to the quality of public education black people have had in America and still continue to have in some areas of the country. This inferior quality of education runs the whole educa-

⁵⁴There were no black teachers in the high socio-economic sample area.

cational spectrum--from the kindergarten to the senior high school. Its effects are felt even in the college and university.

Achievement test scores indicate that black students have not achieved at the same level of white students. The Urban Education Test on Teaching the Disadvantaged can be termed an achievement test since it tests knowledge of the disadvantaged learner. Therefore, it would seem that the black teacher would necessarily score lower than the white teacher. History has thus decreed. It may take several generations to correct the educational inequities of the past.

Hypothesis 5. There is no significant difference in knowledge of the disadvantaged learner between teachers with one to ten years of teaching experience and those with more than ten years of teaching experience.

Using a t-test, this hypothesis was substantiated in Sample A (low socio-economic area).

In Sample B (high socio-economic area), a comparison of the mean scores of teachers with less than ten years of teaching experience and teachers with more than ten years of experience indicated a difference significant at the .05 level. Teachers with less than ten years of teaching experience knew more about the disadvantaged learner than did teachers with more than ten years of teaching experience.

The data may indicate that the younger teachers in Sample B are better educated and more "aware."

Hypothesis 6. There is no significant difference in

knowledge of the disadvantaged learner between teachers at the elementary, junior high, and senior high school level.

Knowledge of the disadvantaged learner increased significantly at each teaching level in both samples. The data suggest that junior high school teachers are more knowledgeable than elementary teachers, and that senior high teachers are more knowledgeable than either junior high or elementary school teachers. The data further suggest that the most knowledgeable teachers are found in the senior high school, while the least knowledgeable teachers are teaching in the elementary schools.

Hypothesis 7. There is no significant difference in knowledge of the disadvantaged learner between teachers with a bachelor's degree and teachers with a master's degree.

There was no evidence in the data to disclaim this hypothesis. However, since this data was gathered only from teachers in the high socio-economic community where approximately fifty per cent of the teachers tested had a master's degree and the other fifty per cent gave evidence of continuing graduate education, it would seem that a study of another sample in which teachers showed less evidence of continuing education might place hypothesis 7 in another light.⁵⁵

Hypothesis 8. There is no significant difference in knowledge of the disadvantaged learner between teachers in the

⁵⁵In-service teachers in the low socio-economic sample area were not asked to describe their educational background due to an oversight in planning the administration of the test in Sample A.

humanities area and teachers in the science and mathematics area.

Humanities teachers and science-mathematics teachers from the low socio-economic community demonstrated no significant difference in their knowledge of the disadvantaged learner. The results from this comparison are somewhat inconclusive since the number of teachers in the group was small. The high school in Sample A (low socio-economic area) did not participate in the testing program. Therefore, only junior high school teachers are considered in this comparison.

In the high socio-economic community, teachers of the humanities had more knowledge of the disadvantaged learner than teachers of science-mathematics. The difference in their mean scores was significant at the .05 level.

Educational Implications

A number of teachers in Sample B (high socio-economic area) refused to take the test because, having no contact with the disadvantaged, they did not think they had knowledge of the disadvantaged. The data from this study indicate that contact with the disadvantaged does not impute knowledge of the disadvantaged. Teachers who worked in a district with NO disadvantaged population scored significantly higher than teachers who worked directly with the disadvantaged learner. This data has implications for both pre-service and in-service education. It is possible to train teachers to become highly knowledgeable about disadvantaged groups. These teachers may or may not have contact with the disadvantaged, but it is

the author's belief that they will be more sensitive to the problems of the disadvantaged learner than those teachers who do not have the same kind of training.

Why do teachers working directly with disadvantaged learners know less about the disadvantaged learner than do teachers who are not working with disadvantaged learners? The author suggests that a study of the educational preparation of teachers in low socio-economic communities would indicate poorer college preparation and less graduate study than teachers in the high socio-economic community. Further analysis of the data indicates that there was a greater number of less experienced teachers in Sample A (low socio-economic area) than in Sample B (high socio-economic area). The more experienced teachers in Sample A knew more about the disadvantaged learner than did the less experienced teacher.

The data also indicate that better teachers, more intelligent teachers, were teaching in an area with no disadvantaged population. Yet both samples were located in the same county. Might this not suggest that redistricting must be done in large city and county school systems in order to insure good teachers for all students.

Race is a variable which cannot be ignored in this study. Black teachers in the low socio-economic sample area knew significantly less about the disadvantaged learner than did the white teachers in the same sample. This may be another illustration of the poor quality education that many blacks have had in previous

generations. Black teachers may yet be in the "catching-up" process.

Recommendations for Further Study

1. Correlate results of The Urban Education Test on Teaching the Disadvantaged with teacher IQ. Teachers with higher IQ's may score significantly higher than teachers with lower IQ's.
2. Correlate results of The Urban Education Test on Teaching the Disadvantaged with educational preparation of teachers. Teachers with academic work beyond the bachelor's degree may score higher than those with a bachelor's degree.
3. Develop an instrument in which half of the items have a pluralistic culture base. Choose the other items from The Urban Education Test on Teaching the Disadvantaged. Such a test might present different results when used with minority group teachers.
4. Use The Urban Education Test on Teaching the Disadvantaged, Flanders Interaction Analysis, and a teacher attitude test to obtain the clearest picture possible of the in-service teacher working directly with the disadvantaged learner.

APPENDIX A

THE URBAN EDUCATION TEST ON TEACHING THE DISADVANTAGED
AND SCORING KEY

PLEASE NOTE:

Pages 96 to 105, "The Urban Education Test in Teaching the Disadvantaged", © 1969 by James Boyer and Jack R. Frymier, not microfilmed at request of author. Available for consultation at the Ohio State University Library.

UNIVERSITY MICROFILMS

APPENDIX B

INTRODUCTORY LETTERS TO TEACHERS AND PRINCIPALS
IN LOW SOCIO-ECONOMIC SAMPLE AREA
AND
INFORMATION SHEET TO ACCOMPANY THE URBAN EDUCATION
TEST ON TEACHING THE DISADVANTAGED.

THE OHIO STATE UNIVERSITY

COLLEGE OF EDUCATION
1945 NORTH HIGH STREET
COLUMBUS, OHIO 43210

FACULTY OF CURRICULUM AND FOUNDATIONS

107

(614) 293-8264

May 1970

Dear Colleague:

Your principal has given us his consent to request your participation in our study. Your participation is voluntary, but we hope that you will be interested enough in our study to help us.

We are attempting to learn more about teaching and learning in disadvantaged settings. In order to do this, The Urban Education Test on Teaching the Disadvantaged was developed in 1969 by Jack R. Frymier and James Boyer of The Ohio State University. Dr. Boyer used the test to assess the knowledge held by 2,000 pre-service teachers about the life and life styles of disadvantaged individuals, and about teaching and learning in depressed areas in the United States. We would now like to use the same test with a like number of in-service teachers.

The test is a difficult one. No one is expected to answer all of the items correctly. There is no penalty for guessing.

In spite of the many demands upon your time, we hope that you will be able to participate in our study.


We ask you not to place your name on either the test or the answer sheet. Return the test booklet and answer sheet to the office, or, if you wish, mail it to Miss Mary Jo Haynes, 103 Ramseyer Hall, 29 West Woodruff, Columbus, Ohio 43210.

We shall be most happy to share our findings with you at the completion of our study. We shall mail a copy of the completed study to your principal.

Yours truly,



Jack R. Frymier, Chairman
Curriculum and Foundations Faculty



Mary Jo Haynes, Teaching Associate
Curriculum and Foundations Faculty

afh

THE OHIO STATE UNIVERSITY

108

College of Education
1945 North High Street
Columbus, Ohio 43210

May 1970

INSTRUCTIONS TO TEACHERS

1. PLEASE DISREGARD THE INSTRUCTIONS ON THE TOP OF THE TWO ANSWER SHEETS. INSTEAD, PLEASE PROVIDE US WITH THE FOLLOWING INFORMATION.

SCHOOL _____ GRADE LEVEL _____ SUBJECT AREA _____

YEARS OF TEACHING EXPERIENCE _____

SCHOOL DISTRICT _____

RACE _____ SEX _____

NO NAMES SHOULD BE PLACED ANYWHERE ON TESTS OR ANSWER SHEETS.

2. USE A #2 PENCIL. DO NOT USE PEN.
3. PLACE ALL MATERIALS IN THIS BROWN ENVELOPE WHEN YOU HAVE COMPLETED THE TESTS. (ANSWER SHEET, TEST, AND INSTRUCTION FORM WITH PERSONAL INFORMATION.)
4. LEAVE YOUR ENVELOPE WITH YOUR BUILDING ADMINISTRATOR.

May 15, 1970

TO: _____, Principal
FROM: _____. Superintendent
SUBJECT: URBAN EDUCATION TEST ON TEACHING THE DISADVANTAGED

There is a great deal of need for in-service education for staff, but we also need some information on "where we stand."

The Urban Education Test on Teaching the Disadvantaged from The Ohio State University can provide some of the information we need for planning workshops, in-service courses, teaching materials, and in general, do a more professional job of planning our program.

Will you provide a time, preferably during the week of May 18th, but certainly no later than the week of May 25th, when all the teachers of your staff will respond to this test.

Results of the test will be provided to each school.

APPENDIX C

INTRODUCTORY LETTERS TO TEACHERS, PRINCIPALS, AND HUMAN RIGHTS
COMMUNICATIONS AGENTS IN HIGH SOCIO-ECONOMIC AREA

AND

INFORMATION SHEET TO ACCOMPANY THE URBAN EDUCATION
TEST ON TEACHING THE DISADVANTAGED

M E M O R A N D U M

SUPERINTENDENT'S COMMITTEE ON HUMAN RIGHTS

Public Schools

May 18, 1970

SUBJECT: Urban Education Test on
Teaching the Disadvantaged

TO: All Teachers in the
Attendance Area

FROM: The Human Rights Committee
Chairman

We have requested your principal and the Human Rights Communications Agent in your building to help us in an Urban Education Testing project. Your participation is voluntary but we hope that you will be interested enough in our study to help us.

We are attempting to learn more about teaching and learning in disadvantaged settings. In order to do this, The Urban Education Test on Teaching The Disadvantaged was developed in 1969 by Jack R. Frymier and James Boyer of The Ohio State University. Dr. Boyer used the test to assess the knowledge held by 2,000 pre-service teachers about the life and life styles of disadvantaged individuals and about teaching and learning in depressed areas in the United States. We would now like to use the same test with a like number of in-service teachers.

The test is a difficult one. No one is expected to answer all of the items correctly. There is no penalty for guessing.

In spite of the many demands upon your time, we hope that you will be able to participate in our study.

We ask you not to place your name on either the test or the answer sheet. Return the test booklet, information, and answer sheet to the office in the envelope. Please do this by Monday, May 25, 1970.

The results of this survey will be available to this committee and should be most useful to the committee in its work. Since the area concerned in our part of the survey does not have many disadvantaged, the findings for us should be interesting.

Thank you for your willingness to help.

M E M O R A N D U M

SUPERINTENDENT'S COMMITTEE ON HUMAN RIGHTS

 Public Schools

May 18, 1970

SUBJECT: Urban Education Test on
Teaching the Disadvantaged

TO: Principals and
Human Rights Communications Agents
in the Attendance Area

FROM: , Committee Chairman

The Superintendent's Committee on Human Rights has agreed to assist Dr. Jack R. Frymier of Ohio State University in attempting to learn more about teaching and learning in disadvantaged settings. To properly establish the validity of conclusions drawn from the test, two groups of teachers need to participate in the program--that is, teachers working in disadvantaged settings and teachers not working in disadvantaged settings.

We, as a Human Rights Committee, feel that participation in such a testing program will aid us in knowing more about ourselves. One of our three major areas of concern is that of inservice training. We feel that the results of this test may assist us in the evaluation of what we have accomplished to date, and also identify guidelines and activities for future inservice training programs.

We are asking the building principal and Human Rights Communications Agent to work as a team in assisting the Committee in this project.

Please distribute the accompanying test envelopes with attached memos to all of your teachers. Encourage them to complete the test as directed in the instructions contained in the envelope. Return all completed tests to the Division of Instruction office by Tuesday, May 26, 1970.

Please emphasize to all that participation in the activity is voluntary. However, the Human Rights Committee believes the study's findings will be valuable to the Committee in its work. Other school districts in the metropolitan Detroit area are also participating in the study.

We are very appreciative of your assistance in this project.

INSTRUCTIONS TO TEACHERS

1. PLEASE DISREGARD THE INSTRUCTIONS ON THE TOP OF THE TWO ANSWER SHEETS. INSTEAD, PLEASE PROVIDE US WITH THE FOLLOWING INFORMATION.

SCHOOL _____ GRADE LEVEL _____ SUBJECT AREA _____

YEARS OF TEACHING EXPERIENCE _____ AND

HIGHEST DEGREE PLUS ADDITIONAL HOURS _____

SCHOOL DISTRICT _____ SEX _____

NO NAMES SHOULD BE PLACED ANYWHERE ON TESTS OR ANSWER SHEETS.

2. USE A #2 PENCIL. DO NOT USE PEN.
3. PLACE ALL MATERIALS (ANSWER SHEET, TEST, AND INSTRUCTION FORM WITH PERSONAL INFORMATION) IN THIS BROWN ENVELOPE WHEN YOU HAVE COMPLETED THE TESTS.
4. LEAVE YOUR ENVELOPE WITH YOUR BUILDING PRINCIPAL.

BIBLIOGRAPHY

- Bills, Robert. "The Classroom Teacher, Mental Health, and Learning." Mental Health and Teacher Education. 1967 Yearbook of The Association of Student Teaching. Cedar Rapids, Iowa: William Brown Co., Inc., 1967.
- Boyer, James B. "A Study of the Cognitive Concepts Held by Pre-Service Teachers Relating to Economically and Socially Disadvantaged Learners." Unpublished Ph.D. dissertation, The Ohio State University, 1969.
- Boyer, James B., and Frymier, Jack R. The Urban Education Test on Teaching the Disadvantaged. Columbus, Ohio: The Ohio State University, 1969.
- Brownell, Samuel. "Teaching the Child from the Disadvantaged Neighborhood." Journal of Teacher Education, XVI (June, 1965), 180-183.
- Conant, James B. Slums and Suburbs. New York: McGraw Hill Book Company, Inc., 1961.
- Davis, Allison. "The Educability of the Children of the Poor." The Unfinished Journey: Issues in American Education. Edited by Dana Stockbridge. New York: John Day, Inc., 1968.
- Deshler, Betty. "Teaching and Teacher Education for Urban Disadvantaged Schools." Journal of Teacher Education, XVI (June, 1965), 156.
- Deutsch, Martin. "The Disadvantaged Child and the Learning Process." Education in Depressed Areas. Edited by Harry Passow. New York: Teachers College, Columbia University, 1963.
- Educational Policies Commission. Education and the Disadvantaged American. Washington, D.C.: National Education Association, 1962.
- Edwards, Esther. "Kindergarten Is Too Late." Saturday Review, June 15, 1968, pp. 68-79.
- Erickson, Maria. "Teaching and Teacher Education for Urban Disadvantaged Schools." Journal of Teacher Education, XVI (June, 1965), 148-149.

- Fantini, Mario and Weinstein, Gerald. Making Urban Schools Work: Social Realities and the Urban School. New York: Holt, Rinehart, and Winston, Inc., 1968.
- Frazier, Alexander. Educating the Children of the Poor. Washington, D.C.: Association for Supervision and Curriculum Development, 1968.
- Frymier, Jack R. The Nature of the Educational Method. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965.
- _____. "Strategies to Reinforce Learning." The Bulletin of the National Association of Secondary Principals, L (December, 1966), 69-92.
- Galloway, Charles. "The Plight of the Inner City." Educational Leadership, XXV (October, 1967), 15-18.
- Goldberg, Miriam L. "Adapting Teacher Styles to Pupil Differences: Teachers for Disadvantaged Children." Merrill-Palmer Quarterly (April, 1964), 161-178.
- Gordon, Edmund W., and Wilkerson, Doxey A. Compensatory Education for the Disadvantaged. New York: College Entrance Examination Board, 1966.
- Harrington, Michael. The Other America: Poverty in the United States. New York: The MacMillan Company, 1962.
- Haubrich, Vernon F. "The Culturally Disadvantaged and Teacher Education." The Reading Teacher, XXVIII (March, 1965), 499-505.
- Hawk, Travis. "A Neglected Aspect of Teacher Education for the Disadvantaged." Journal of Teacher Education, XIV (Winter, 1968), 442-446.
- Hays, William L. Statistics for Psychologists. New York: Holt, Rinehart and Winston, 1963.
- Henning, William L. "An Economic Analysis of Savings and Income in Rural America." Unpublished Ph.D. dissertation, The Ohio State University, 1969.
- Hickerson, Nathaniel. Education for Alienation. New Jersey: Prentice-Hall, Inc., 1966.
- Humphrey, Hubert H. "Education--The Ideal and the Reality." National Conference on Education of the Disadvantaged. Report of a National Conference held in Washington, D.C.: United States Department of Health, Education, and Welfare, Office of Education, 1966.

- Kaplan, Jerome D. "Teaching Number Conservation to Disadvantaged Children." Dissertation Abstracts, XXVIII (June, 1968). 3492-3493B.
- Kohl, Herbert. 36 Children. New York: The New American Library, 1967.
- Kozol, Jonathan. Death at an Early Age. New York: Bantam Books, Inc., 1967.
- Lohman, Joseph. Cultural Patterns in Urban Schools. Berkeley, California: University of California Press, 1967.
- Marans, Allen E., and Lourie, Reginald. "Hypothesis Regarding the Effects of Child-Rearing Patterns on the Disadvantaged Child." Disadvantaged Child. Edited by Jerome Hellmuth. New York: Brunner/Mazel, Inc., 1967.
- Miller, S.M., and Riessman, Frank. "The Working Class Subculture: A New View." Social Problems, IX (1961), 92.
- Ornstein, Allen. "Learning to Teach the Disadvantaged." Journal of Secondary Education, XLI (May, 1966), 206-213.
- _____. "Theory as a Basic Guide for Teaching the Disadvantaged." Clearing House, XLII (March, 1968), 434-445.
- Passow, Harry. "Diminishing Teacher Prejudice." The Inner City Classroom: Teacher Behaviors. Edited by Robert Strom. Columbus, Ohio: Charles Merrill Books, Inc., 1966.
- Ribich, Thomas I. Education and Poverty. The Brookings Institution: Washington, D.C., 1968.
- Riessman, Frank. The Culturally Deprived Child. New York: Harper and Row, 1962.
- Rivlin, Harry. "Comments from the Guest Editors." Journal of Teacher Education, XVI (June, 1965), 183-186.
- _____. "New Patterns for Urban Teacher Education." Journal of Teacher Education, XVII (Summer, 1966), 177-184.
- _____. Teachers for Our Big City Schools. New York: Anti-Defamation League of B'nai B'rith, n.d.
- Rosenthal, Robert, and Jacobson, Lenore. Pygmalion in the Classroom. New York: Holt, Rinehart and Winston, Inc., 1968.

- Sexton, Patricia. Education and Income. New York: Viking Press, 1961.
- Spodek, Bernard. "Pressures on Young Children." Theory Into Practice, VII (February, 1968), 14-16.
- Strom, Robert D. Teaching in the Slum School. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965.
- Taba, Hilda, and Elkins, Deborah. Teaching Strategies for the Culturally Disadvantaged. Chicago: Rand McNally and Co., 1966.
- Wagner, Bartlett A. "The Responses of Economically Advantaged and Economically Disadvantaged Sixth Grade Pupils to Science Demonstrations." Dissertation Abstracts, XXVIII (January, 1968), 3086A.
- Walbesser, Henry H., and Carter, Heather L. "Acquisition of Elementary Science Behavior by Children of Disadvantaged Families." Educational Leadership, XXV (May, 1968), 743-747.