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A STUDY OF TEACHER PERSONALITY FACTORS  
AND STUDENT ON-TASK BEHAVIOR

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A STUDY OF TEACHER PERSONALITY FACTORS  
AND STUDENT ON-TASK BEHAVIOR

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A Thesis  
Presented to  
the Faculty of the Graduate School  
Appalachian State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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by  
Vickie Johnson  
May 1978

## ABSTRACT

The present study was designed to measure contingent relationships between certain teacher personality factors and student attention-to-task behavior. Subjects were fifty-one teachers of 1,301 students, who taught grades one through six in a northwestern North Carolina county. The sample was selected in part by principals and in part by teacher alacrity and author selection. Each teacher completed Cattell's Sixteen Personality Factor Questionnaire (16 PF). Attention-to-task behavior of students was measured by an author-designed instrument. The writer observed the number of students on task in each classroom at one-minute intervals. Data were added into a multiple stepwise linear regression. Factor O of 16 PF (self-assurance versus apprehension) was the only factor related significantly to student on-task behavior ( $r = -.32$ ,  $p \leq .05$  two-tailed test). A t-test for differences between principal-selected and self-selected subjects and a t-test for differences between male and female subjects were computed; the results of both tests were non-significant. Due to attention-to-task scores masking other potential factors, an intensive study was made of those teachers having the ten most extreme class scores. The teachers' scores differed measurably on Factors C, G, and O of 16 PF, indicating tendencies toward emotionality,

expediency, and apprehension for teachers with low on-task student behavior. Teachers with high on-task student behavior tended to be more emotionally mature, more self-assured, and conscientious. An examination of the personality data revealed characteristics of the sample in general. The hypothesis was supported by the data, indicating relationships between teacher personality factors and student on-task behavior.



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## Chapter I

### INTRODUCTION

Educational psychology has devoted more than a half century to studying what makes a teacher effective.<sup>1</sup> Commenting on this body of research literature, A. S. Barr and David Ryans have noted that two distinct systems of knowledge have evolved. One is descriptive of professional competence, i.e., knowledge of subject, techniques, and methods of teaching. The other comprises personal qualities, i.e., values, attitudes, personality.<sup>2,3</sup>

Teacher personality was investigated in the present study. The writer assumed that the teacher's personal qualities were causal determiners for various aspects of professional competence. In particular, the position was taken that personality, or what one *is*, is of greater importance

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<sup>1</sup>A. S. Barr, "The Personal Prerequisites to Teacher Effectiveness," *Teacher Effectiveness*, ed. A. S. Barr (Madison: Dembar Publications, Inc., 1961), pp. 99-106.

<sup>2</sup>Ibid.

<sup>3</sup>David G. Ryans, *Characteristics of Teachers* (Washington, D.C.: American Council on Education, 1960), p. 4.

and influence than what one knows or does.<sup>4,5,6,7</sup> No longer are teachers thought of exclusively in terms of subject knowledge, deductive reasoning, and ability to transfer that knowledge to students. Rather, the focus has turned to the affective qualities of the teacher.<sup>8</sup>

Affective teaching dominated the writer's six years in the classroom. However, classroom climate was not always at the desired level. The writer, therefore, chose a study in personality in hopes of better understanding what constituted a more highly effective teacher.

#### STATEMENT OF THE PROBLEM

The purpose of this study was to investigate a contingent relationship between certain teacher personality factors and student task involvement. More specifically, the hypothesis considered in this study is that teacher

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<sup>4</sup>Leon W. Goldrich, "Influence of Teacher Personality upon Pupil Adjustment," *Education* 57:257-263, January, 1937.

<sup>5</sup>Percival M. Symonds, "Personality of the Teacher," *Journal of Educational Research*, 40:652-661, May, 1947.

<sup>6</sup>J. W. Getzels and P. W. Jackson, "The Teacher's Personality and Characteristics," *Handbook of Research on Teaching*, ed. N. L. Gage (Chicago: Rand McNally & Company, 1963), pp. 506-582.

<sup>7</sup>Dwight Webb, "Teacher Sensitivity: Affective Impact on Students," *The Journal of Teacher Education*, 22:255-259, Winter, 1971.

<sup>8</sup>Angelo V. Boy and Gerald J. Pine, *Expanding the Self Personal Growth for Teachers* (Dubuque, Iowa: Wm. C. Brown Publishers, 1971), p. ix.



personality factors affect the degree to which students maintain on-task behavior.

#### DELIMITATIONS OF THE STUDY

The investigation was designed to discern which, if any, teacher personality characteristics deter or contribute to student task involvement. The personality qualities were examined as delineated on the 16 PF Inventory. Task involvement was determined through observation during short handwriting lessons.

Handwriting lessons were employed as tasks in all classrooms and involvement was recorded at one-minute intervals for a ten-minute period. Statements about personality were confined to the sixteen characteristics outlined in the selected inventory. No attempt was made to obtain a stratified sample representing the actual racial and sexual composition of the county's population of teachers.

Educators studied taught grades one through six. All were drawn from eleven of the seventeen elementary and primary schools of one northwestern North Carolina county. While findings may be descriptive of most teachers in this system, sample selection procedures limit generalizations of the findings to the county studied.

## DEFINITION OF TERMS

On Task

The terms "on task" and "task involvement" are synonymous in their use throughout this paper. Students who were (a) leaning over, (b) looking upon, (c) writing on a handwriting sheet, or (d) discussing it with a teacher or aide were considered "on task." Occasionally a teacher interrupted students during the checking period to clarify a point. On task momentarily changed to giving attention to the teacher. Teachers were asked to assign an ancillary task should students complete the handwriting assignment before the ten-minute checking period elapsed. These tasks ranged from sitting in desks quietly to resuming work on the day's assignments. Students were regarded as not on task if they sat with hand raised for teacher assistance or when gathering materials following completion of the handwriting task. (See Appendixes A, B, C, and D, pages 33-36.)

Personality Factor

This term refers to one of the sixteen personal characteristics evaluated in the 16 PF Inventory. Each is measured on a whole number scale of one to ten.

Checking Period

This was the section of time, in each classroom, when task involvement was recorded. Following each teacher's instructions for the handwriting sheets, the author recorded

the number of students on task every sixty seconds for ten minutes. A copy of the chart used in recording task involvement may be found in Appendix E.

## Chapter II

### REVIEW OF THE LITERATURE

Keen professional interest in the attributes of effective teachers is manifested by the thousands of books, articles, and research projects completed on the subject. Years of research and rethinking have not, however, produced acceptable criteria for assessing teacher effectiveness.<sup>9</sup> Although assessment techniques are not fully developed, salient variables such as classroom management, teacher personality, interpersonal skills, and teaching styles have emerged.

Researchers disagree among themselves about the importance of personality factors. There is no doubt, however, that the educational impact of the highly effective or ineffective teacher can be attributed not only "to what he knows, or even what he does, but in a very real sense to what he is."<sup>10</sup> This perspective is also supported by Ryans, Hamachek, and Combs.

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<sup>9</sup>George D. Handley, *Personality, Learning and Teaching* (London: Routledge & Kegan Paul, 1973), p. 86.

<sup>10</sup>J. W. Getzels and P. W. Jackson, "The Teacher's Personality Characteristics," *Handbook of Research on Teaching*, ed. N. L. Gage (Chicago: Rand McNally & Co., 1963), pp. 506-582.

Details of an early study in teacher effectiveness were published in 1935 (*The Successful Teacher*) by M. Birkinshaw. She observed 3,000 female teachers working in the urban and rural schools of England. From her observations, Birkinshaw concluded that the more successful educators were outgoing (Eysnek later termed this "extrovert"), and emotionally stable. In her opinion, exceptional teachers possessed the ability to let students work through their own problems and mistakes without interference.<sup>11</sup>

In a 1937 article, Leonard Goldrich, the Director of Child Guidance for New York City, expressed, rather emphatically, the need for teachers with high personal qualities such as patience, sympathy, understanding, insight and love. Goldrich was of the opinion that teaching methods developed by those having the aforementioned qualities were superior to those acquired from pedagogical texts of supervisors.<sup>12</sup>

Lewin, Lippitt, and White's experiments in group management styles (1939) uncovered yet another dimension. A boys' camp was organized for close observation of participant reaction to various styles of leadership: autocratic,

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<sup>11</sup>Handley, op. cit., pp. 84-95.

<sup>12</sup>Leon W. Goldrich, "Influence of Teacher Personality upon Pupil Adjustment."



democratic, and laissez-faire. The democratic style proved to be the most effective.<sup>13</sup>

Teacher-related research conducted in 1939 emphasized measurement and validation to a greater degree than previous studies. Again, personal qualities were the focus. Adaptability, intelligence, and attitudes were among those found to be related to effective teaching.<sup>14</sup>

A sample composed of Army Air Corps technical instructors and student teachers in agriculture and home economics was administered personality inventories to determine traits of the more successful and the less successful instructors. An analysis of the data revealed four significant characteristics. The more successful teachers saw themselves as being more sensitive and socially at ease. They were slower in making decisions and quick to accept responsibility.<sup>15</sup>

Witty (1947) attempted to outline characteristics of a "good" teacher through pupil evaluation. In a radio broadcast students were asked to describe the teacher who

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<sup>13</sup>Kurt R. Lewin, Ronald Lippitt, and Ralph K. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates," *Journal of Social Psychology*, 10:271-299, May, 1939.

<sup>14</sup>A. S. Barr, "Recruitment for Teacher Training and Prediction of Teaching Success," *Review of Educational Research*, 10:185-190, June, 1940.

<sup>15</sup>Arthur F. Dodge, "What Are the Personality Traits of the Successful Teacher?," *Journal of Applied Psychology*, 27:325-337, August, 1943.



had helped them most. Approximately 12,000 responses were received and evaluated. The replies revealed very definite opinions of what constituted a good teacher. Students described a person who was helpful, cooperative, kind, fair, democratic, consistent, friendly, flexible, genuinely interested in pupil problems, and possessing a sense of humor.<sup>16</sup>

Symonds (1947) did extensive studies on teacher personality. He deemed teacher ratings by students to be an inadequate measure. Quantitative studies had proven to be no more decisive or directive. Subsequently, Symonds developed a list of personality factors he judged essential to teacher success: (1) a teacher should genuinely like teaching; (2) a teacher needs to be secure, have self-respect, dignity, and courage as opposed to feelings of inferiority and inadequacy; (3) a teacher needs to identify herself with children and have the capacity to empathize; (4) a teacher should have enough emotional stability to accept child aggression, carelessness, and slowness; (5) a teacher needs to be free from anxiety in order to experiment and innovate; and (6) a teacher should not be too self-centered or selfish.<sup>17</sup>

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<sup>16</sup>Paul Witty, "An Analysis of the Personality Traits of the Successful Teacher," *Journal of Educational Research*, 40:662-671, May, 1947.

<sup>17</sup>Percival M. Symonds, "Personality of the Teacher," *Journal of Educational Research*, 40:652-661, May, 1947.

Lamke rated high school educators (N=32) completing their first year of teaching according to their success and administered the Sixteen Personality Factor Inventory (16 PF). On the basis of his findings, he suggested profiles of the most and least successful teachers. Better teachers were described as outgoing and socially active, sensitive and emotionally responsive, cool and demanding. In contrast, the poorer teachers were timid and staid, emotionally unresponsive, easily pleased, conscientious and very attentive to people.<sup>18</sup>

Despite extensive studies by a variety of researchers, few concrete relationships between personality and effective teaching could be found. The more reliable knowledge in the 1940s was that pupils progressed faster with sympathetic, kind, and cheerful teachers.<sup>19</sup>

Under the direction of David G. Ryans, the American Council on Education and The Grand Foundation supported an extensive six-year study, the Teacher Characteristics Study. The major objectives were to identify and analyze patterns of classroom behavior, attitudes, viewpoints, and intellectual and emotional qualities, competence, and methods and techniques which may characterize teachers. (Of interest

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<sup>18</sup>Tom Arthur Lamke, "Personality and Teaching Success," *Journal of Experimental Education*, 20:217-259, December, 1951.

<sup>19</sup>E. G. Guba and J. W. Getzels, "Personality and Teacher Effectiveness: A Problem in Theoretical Research," *Journal of Educational Psychology*, 46:330-344, October, 1955.

to this study are those characteristics pertaining to personality.) Each substudy was examined for characteristics of superior teachers. The more highly rated teachers were found to possess strong interests in reading and the arts, and displayed superior verbal ability. They exhibited above average degrees of objectivity, restraint, tolerance, and emotional stability. They were fair, friendly, generous in praise, socially active and inclined to make a positive impression. Their classroom procedures were nondirective; they were permissive, and enjoyed pupil relationships.<sup>20</sup>

Amidon and Flanders studied the affective impact of teacher sensitivity on dependent-prone children. Their research showed that students whose teacher was directive and business-like became inhibited, compliant, and had poor achievement. Conversely, teachers of higher achieving students gave abundant praise and little criticism, encouraged student participation, were nondirective and seldom lectured.<sup>21</sup>

Warburton, Butcher, and Forrest utilized the IPAT Sixteen Personality Factor Questionnaire and the student teaching grade of 100 teachers-in-training to measure teacher effectiveness. Three Factors, G, I, and Q<sub>3</sub>, were

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<sup>20</sup>David G. Ryans, *Characteristics of Teachers* (Washington, D.C.: American Council on Education, 1960), pp. 343-367.

<sup>21</sup>E. Amidon and N. A. Flanders, "The Effects of Direct and Indirect Teacher Influence on Dependent-Prone Students Learning Geometry," *Journal of Educational Psychology*, 52:286-291, December, 1961.



significantly correlated with high grades, conscientiousness, tender-mindedness, and self-control.<sup>22</sup>

In a 1968 study completed by Edwin McClain, successful secondary student teachers were described by the following Sixteen Personality Factor descriptors. Successful male students were more conscientious, trusting, venturesome, experimenting, and tense than less successful male students. Successful female teachers-in-training were more outgoing, assertive, happy-go-lucky, venturesome and undisciplined than less successful females.<sup>23</sup>

The Edwards Personal Preference Schedule and the Organizational Climate Descriptive Questionnaire (OCD) were employed by Donald Anderson in a 1969 study. From the OCD scores, teachers were designated as maintaining an open or closed classroom climate. Those with open climates were less introverted and scored lower on abasement than did the closed climate instructors.<sup>24</sup>

In view of hard research, professional psychological circles (1972) were redefining the term "personality

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<sup>22</sup>F. W. Warburton, H. J. Butcher and G. M. Forrest, "Predicting Student Performance in a University Department of Education," *British Journal of Educational Psychology*, 33:68-82, 1963, cited by John D. Morris, "Personality and Student Teaching Success," *Journal of Experimental Education*, 43:15-20, Summer, 1975.

<sup>23</sup>Edwin W. McClain, "Sixteen PF Scores and Success in Student Teaching," *Journal of Teacher Education*, 19:25-32, Spring, 1968.

<sup>24</sup>Donald D. Anderson, "Personality Attributes of Teachers in Organizational Climates," *Journal of Educational Research*, 62:441-443, July-August, 1969.

styles." Hamachek expanded that dimension to include teaching and teacher behavior. According to Hamachek, the teacher's choices of method, instructional strategy, method of inquiry, or manner were ultimately related to and influenced by his individual personality style. More specifically, Hamachek thought that "the kind of teacher one is depends on the kind of person one is."<sup>25</sup> It was logical, then, that Hamachek applied Schapiro's clinically identified major personality styles (obsessive-compulsive, paranoid, hysterical, and impulsive) to teaching behavior. Since the classroom environment tended to exaggerate teacher (personal) characteristics, he felt better teaching would result from looking at and correcting the flaws in individual styles.<sup>26</sup>

Doyal and Forsyth (1973) studied manifest teacher anxiety in relation to student test anxiety. Ten third grade classes, with their ten female teachers, were administered the Test Anxiety Scale for Children (TASC) and Manifest Anxiety Scale (MAS), respectively. A high Pearson r correlation ( $r=0.65$ ,  $p < .025$ , two-tailed test) led the researchers to suggest a positive relationship between

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<sup>25</sup>Don E. Hamachek, "Personality Styles and Teacher Behavior," *Educational Forum*, 36:313-322, March, 1972.

<sup>26</sup>*Ibid.*

teacher manifest anxiety level and degree of test anxiety of the children.<sup>27</sup>

Arthur Combs, in a statement about teachers, reasoned that "a good teacher is first and foremost a person, and this fact is the most important and determining thing about him."<sup>28</sup> According to Combs, researchers have been unable to isolate any common trait or practice of good teachers because teaching is an intensely personal thing.<sup>29</sup>

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<sup>27</sup>Guy T. Doyal and Robert A. Forsyth, "The Relationship between Teacher and Student Anxiety Levels," *Psychology in the Schools*, 10:231-232, April, 1973.

<sup>28</sup>Arthur W. Combs, *The Professional Education of Teachers* (Boston: Allyn and Bacon, Inc., 1974), p. 6.

<sup>29</sup>*Ibid.*, pp. 5-6.



### Chapter III

#### DESIGN OF STUDY

##### THE SAMPLE

The sample for the present investigation was comprised of fifty-one educators of 1,301 children whose ages ranged from six to thirteen, or grades one through six. Teacher age range was twenty-three to sixty, with a mean of thirty-three. All taught in a northwestern county of North Carolina. Four percent were black and thirteen and one-half percent male.

The choice of which county schools would participate was left to the individual principal's discretion. Eleven principals volunteered their schools and six declined. The number of teachers participating in each school ranged from one to eight. Sample selection within the schools was a combination of principal designation, teacher alacrity, and in five cases, author selection. Once, in each of two schools, the author requested a male teacher be added to the sample. The sample teachers in two schools were derived from volunteers, totaling five. One complete faculty volunteered, of which the writer chose three. (This selection put in balance the grade levels studied at that point.) In one school the principal requested that all teachers of

grades one through six participate. The sample teachers in the remaining schools were principal selected. In all of these seven schools, the sample never comprised over twenty percent of the faculty.

One teacher was eliminated because pupils' handwriting forms were unusually faint. This created an abnormally high degree of distraction from task. The final sample, therefore, consisted of fifty-one members.

There were twenty-four primary and twenty-seven intermediate classes. Table 1, page 17, identifies grade level and manner for sample selection.

#### INSTRUMENT

The IPAT Sixteen Personality Factor Questionnaire (16 PF) was selected for assessment of teacher characteristics. It is one of few such inventories founded on factor-analytic experimentation and built up by everyday life rating data, objective tests, etc. The desired traits, or *factors*, are designed to measure an individual's standing on several primary personality qualities.<sup>30</sup>

#### TESTING PROCEDURES

The author met with participating teachers of each school prior to testing. These meetings focused

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<sup>30</sup> Raymond B. Cattell, *Sixteen Personality Factor Handbook* (Champaign, Illinois: Institute for Personality and Ability Testing, 1970), pp. 1-13.

Table 1  
Sample Selection by Grade Level

|                                   | 1 | 1-2 | 2 | 2-3 | 3 | 3-4 | 4 | 4-5 | 5  | 6    |
|-----------------------------------|---|-----|---|-----|---|-----|---|-----|----|------|
| Principal<br>Selected             | 4 | 1   | 2 | 4   | 4 |     | 7 | 1   | 5  | 5 33 |
| Author<br>Selected                |   |     |   |     |   |     |   |     | 3  | 2 5  |
| Entire<br>Faculty<br>Participated | 1 | 1   | 1 | 1   |   | 1   |   | 1   | 1  | 1 8  |
| Volunteered                       | 1 |     |   | 1   | 2 |     |   |     | 1  | 5    |
| TOTAL                             | 6 | 2   | 3 | 6   | 6 | 1   | 7 | 2   | 10 | 8 51 |

on acquainting teachers with research details and making appointment schedules.

The IPAT Sixteen Personality Factor Questionnaire (16 PF), a self-explanatory survey, was completed by the classroom teachers. Each teacher gave instructions to the children for completing the handwriting lessons and any ancillary tasks. (Instructions to teachers regarding handwriting procedures had been designed to keep conditions relatively normal.) On-task behavior was recorded, upon completion of teacher instructions, by the writer. (See Appendix E, page 39.)

## Chapter IV

### RESULTS

The writer sought to investigate the nature and extent of the relationship between various teacher personality variables and the degree of learner attention-to-task characteristic of a teacher's classroom. As a measure of various aspects of teacher personality, Cattell's Sixteen Personality Factor Questionnaire (16 PF) was completed by fifty-one teachers at eleven schools in the western piedmont area of North Carolina. In each of the classrooms in which these fifty-one teachers taught, an observer attempted to assess the extent to which the children in the class were giving attention to assigned classroom tasks. In this assessment the observer noted, at one-minute intervals, the number of children who were "on task." The ten data from each classroom were converted to a percentage-of-children-on-task measure, from which an average-of-children-on-task measure was computed for each teacher. In this sample of fifty-one primary and elementary school teachers, on an average, 88.2 percent of the children were judged to be on task. The highest classroom mean-percentage was 99.4 percent, the lowest 69.5 percent. The standard deviation for the mean-percentage of all classrooms was 6.3.



Each sample teacher completed the 16 PF Questionnaire. This instrument has been designed to assess sixteen personality dimensions on which people are assumed to differ. (See Appendix F, page 40.) The results of this questionnaire data are presented in Table 2, pages 21-22. Inspection of this data shows that teachers in this sample judged themselves as somewhat apprehensive or troubled, highly controlled and frustrated or tense, quite conscientious, and very tender-minded and sensitive to people.

Using mean-percentage of children-on-task as the dependent variable, each of the 16 personality dimensions was added in a multiple stepwise linear regression procedure in order to ascertain to what extent various personality dimensions, singly and in unison, predict mean time-on-task typical of a teacher's classroom. The correlation matrix on which this analysis was based is presented in Table 3, page 23. The results of the multiple regression procedure are presented in Table 4, pages 24-25.

The only significant correlation between the dependent variable and personality factors was "0" (self-assured versus apprehensive). This was a negative correlation (-.32). Factor "0" accounted for ten percent of the total variance. The remaining variables were dropped in the second step because they fell below the 2.5 F level for further stepping.



Table 2

On-Task and Personality Characteristics Data,  
and Characteristics of the Sample

| Average<br>% On-<br>Task | A  | B  | C  | E  | F  | G  | H  | I  | L  | M  | N  | O  | Q <sub>1</sub> | Q <sub>2</sub> | Q <sub>3</sub> | Q <sub>4</sub> | Sex | Average<br>Student<br>Age | School | Sample<br>Selec-<br>tion |
|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----------------|----------------|----------------|----------------|-----|---------------------------|--------|--------------------------|
| 99.44                    | 04 | 09 | 08 | 10 | 04 | 09 | 06 | 08 | 07 | 01 | 04 | 06 | 01             | 07             | 10             | 07             | 01  | 07                        | 07     | 02                       |
| 98.13                    | 04 | 04 | 07 | 04 | 04 | 08 | 05 | 08 | 03 | 06 | 07 | 06 | 04             | 08             | 08             | 06             | 01  | 08                        | 09     | 01                       |
| 96.80                    | 07 | 08 | 06 | 08 | 07 | 06 | 07 | 06 | 03 | 03 | 08 | 06 | 04             | 06             | 06             | 06             | 01  | 11                        | 11     | 01                       |
| 96.80                    | 08 | 07 | 08 | 05 | 06 | 08 | 06 | 07 | 02 | 01 | 05 | 05 | 03             | 06             | 10             | 05             | 01  | 08                        | 02     | 01                       |
| 96.21                    | 05 | 08 | 06 | 03 | 04 | 08 | 05 | 06 | 03 | 05 | 08 | 03 | 05             | 07             | 08             | 04             | 01  | 09                        | 06     | 02                       |
| 95.42                    | 04 | 08 | 05 | 10 | 06 | 04 | 08 | 05 | 05 | 07 | 04 | 04 | 04             | 06             | 06             | 06             | 01  | 08                        | 03     | 01                       |
| 94.35                    | 05 | 09 | 07 | 01 | 06 | 08 | 05 | 07 | 03 | 04 | 05 | 06 | 01             | 05             | 07             | 08             | 01  | 09                        | 09     | 01                       |
| 93.69                    | 03 | 07 | 07 | 05 | 05 | 06 | 06 | 06 | 05 | 05 | 04 | 04 | 02             | 08             | 05             | 03             | 01  | 09                        | 06     | 02                       |
| 93.48                    | 08 | 08 | 08 | 06 | 10 | 06 | 10 | 10 | 04 | 10 | 04 | 01 | 06             | 04             | 10             | 02             | 02  | 08                        | 02     | 01                       |
| 92.86                    | 04 | 08 | 05 | 04 | 04 | 05 | 03 | 05 | 05 | 03 | 08 | 05 | 03             | 07             | 06             | 08             | 01  | 09                        | 03     | 01                       |
| 92.85                    | 03 | 09 | 05 | 05 | 05 | 09 | 02 | 08 | 03 | 07 | 07 | 05 | 03             | 08             | 08             | 07             | 01  | 11                        | 01     | 02                       |
| 92.81                    | 06 | 07 | 04 | 08 | 04 | 07 | 09 | 06 | 06 | 06 | 03 | 07 | 07             | 07             | 06             | 07             | 01  | 10                        | 10     | 02                       |
| 92.80                    | 07 | 07 | 07 | 05 | 03 | 04 | 02 | 08 | 06 | 03 | 06 | 05 | 04             | 09             | 08             | 06             | 01  | 11                        | 11     | 01                       |
| 92.41                    | 05 | 08 | 05 | 02 | 05 | 03 | 03 | 05 | 05 | 08 | 06 | 04 | 01             | 07             | 04             | 06             | 02  | 10                        | 10     | 02                       |
| 92.32                    | 06 | 10 | 04 | 03 | 05 | 06 | 01 | 05 | 04 | 06 | 03 | 10 | 05             | 06             | 05             | 10             | 02  | 11                        | 06     | 02                       |
| 92.31                    | 03 | 10 | 07 | 05 | 04 | 06 | 07 | 06 | 05 | 06 | 07 | 06 | 04             | 07             | 07             | 04             | 01  | 08                        | 02     | 01                       |
| 92.08                    | 07 | 04 | 08 | 06 | 08 | 06 | 08 | 07 | 06 | 07 | 05 | 05 | 04             | 05             | 08             | 04             | 01  | 07                        | 06     | 02                       |
| 92.07                    | 05 | 08 | 04 | 08 | 09 | 09 | 05 | 04 | 05 | 02 | 02 | 09 | 05             | 09             | 06             | 07             | 01  | 11                        | 11     | 01                       |
| 91.85                    | 04 | 06 | 08 | 07 | 08 | 04 | 06 | 05 | 05 | 06 | 05 | 06 | 06             | 06             | 06             | 05             | 01  | 09                        | 08     | 01                       |
| 91.61                    | 04 | 08 | 10 | 06 | 10 | 10 | 08 | 05 | 06 | 03 | 02 | 03 | 01             | 07             | 10             | 04             | 01  | 09                        | 08     | 01                       |
| 90.97                    | 05 | 05 | 04 | 04 | 04 | 04 | 02 | 08 | 04 | 07 | 10 | 07 | 05             | 08             | 08             | 08             | 01  | 10                        | 03     | 01                       |
| 90.77                    | 09 | 07 | 10 | 05 | 08 | 08 | 09 | 07 | 03 | 07 | 05 | 03 | 04             | 05             | 09             | 02             | 01  | 08                        | 06     | 02                       |
| 90.50                    | 03 | 08 | 05 | 08 | 06 | 04 | 05 | 07 | 07 | 04 | 08 | 06 | 03             | 08             | 08             | 08             | 01  | 08                        | 03     | 01                       |
| 90.42                    | 10 | 06 | 09 | 04 | 07 | 09 | 09 | 10 | 05 | 06 | 03 | 04 | 02             | 06             | 10             | 03             | 02  | 11                        | 05     | 01                       |
| 90.31                    | 04 | 08 | 02 | 01 | 06 | 09 | 03 | 07 | 07 | 07 | 04 | 08 | 04             | 04             | 08             | 07             | 01  | 10                        | 01     | 02                       |
| 90.00                    | 01 | 08 | 03 | 08 | 10 | 05 | 07 | 07 | 06 | 04 | 07 | 09 | 03             | 06             | 06             | 09             | 01  | 10                        | 03     | 01                       |
| 90.00                    | 07 | 06 | 06 | 04 | 05 | 05 | 07 | 02 | 03 | 03 | 07 | 07 | 01             | 03             | 09             | 07             | 01  | 09                        | 11     | 01                       |

Table 2 (continued)

| Average<br>% On-<br>Task | A  | B  | C  | E  | F  | G  | H  | I  | L  | M  | N  | O  | Q1 | Q2 | Q3 | Q4 | Sex | Average<br>Student<br>Age | School | Sample<br>Selec-<br>tion |
|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|---------------------------|--------|--------------------------|
| 90.00                    | 03 | 09 | 03 | 01 | 01 | 08 | 03 | 09 | 02 | 03 | 07 | 09 | 03 | 10 | 08 | 09 | 01  | 08                        | 09     | 01                       |
| 89.33                    | 05 | 08 | 01 | 03 | 03 | 08 | 04 | 08 | 06 | 06 | 02 | 10 | 01 | 07 | 07 | 10 | 02  | 09                        | 04     | 01                       |
| 88.97                    | 04 | 06 | 07 | 02 | 07 | 05 | 06 | 07 | 07 | 05 | 07 | 06 | 04 | 07 | 08 | 07 | 01  | 10                        | 06     | 02                       |
| 88.75                    | 03 | 08 | 05 | 07 | 04 | 08 | 07 | 09 | 08 | 09 | 05 | 06 | 05 | 08 | 04 | 09 | 01  | 07                        | 04     | 01                       |
| 88.70                    | 05 | 05 | 09 | 05 | 04 | 09 | 05 | 09 | 04 | 05 | 07 | 05 | 04 | 07 | 10 | 03 | 01  | 07                        | 03     | 01                       |
| 88.62                    | 04 | 10 | 05 | 06 | 03 | 07 | 07 | 06 | 09 | 06 | 05 | 09 | 01 | 09 | 07 | 10 | 01  | 10                        | 04     | 01                       |
| 88.48                    | 06 | 09 | 10 | 03 | 08 | 09 | 05 | 08 | 01 | 07 | 05 | 05 | 07 | 03 | 08 | 03 | 02  | 10                        | 08     | 02                       |
| 87.83                    | 06 | 07 | 04 | 05 | 07 | 05 | 03 | 07 | 05 | 07 | 03 | 08 | 07 | 05 | 07 | 08 | 01  | 07                        | 05     | 01                       |
| 87.62                    | 05 | 07 | 04 | 05 | 05 | 07 | 08 | 06 | 06 | 04 | 07 | 06 | 04 | 08 | 08 | 09 | 01  | 08                        | 05     | 01                       |
| 87.50                    | 06 | 08 | 08 | 09 | 08 | 05 | 08 | 07 | 06 | 06 | 04 | 06 | 07 | 03 | 05 | 04 | 01  | 08                        | 10     | 02                       |
| 86.36                    | 06 | 08 | 05 | 04 | 05 | 10 | 04 | 04 | 04 | 04 | 08 | 06 | 01 | 03 | 08 | 06 | 01  | 08                        | 02     | 01                       |
| 86.00                    | 02 | 07 | 06 | 04 | 09 | 09 | 08 | 08 | 05 | 06 | 06 | 05 | 03 | 08 | 09 | 07 | 01  | 06                        | 06     | 02                       |
| 85.20                    | 05 | 08 | 04 | 07 | 10 | 03 | 07 | 08 | 07 | 04 | 03 | 09 | 07 | 02 | 02 | 09 | 01  | 08                        | 10     | 02                       |
| 84.80                    | 05 | 08 | 03 | 04 | 04 | 08 | 04 | 09 | 02 | 06 | 04 | 06 | 01 | 07 | 10 | 06 | 01  | 11                        | 01     | 02                       |
| 84.07                    | 07 | 08 | 05 | 04 | 06 | 07 | 03 | 10 | 08 | 05 | 04 | 07 | 05 | 07 | 07 | 09 | 01  | 09                        | 08     | 01                       |
| 83.50                    | 05 | 07 | 03 | 04 | 04 | 05 | 05 | 08 | 04 | 05 | 07 | 04 | 01 | 06 | 07 | 08 | 01  | 07                        | 03     | 01                       |
| 80.00                    | 06 | 08 | 04 | 04 | 05 | 06 | 02 | 06 | 04 | 05 | 08 | 07 | 03 | 10 | 03 | 08 | 01  | 11                        | 04     | 01                       |
| 78.80                    | 05 | 09 | 08 | 09 | 07 | 03 | 05 | 06 | 06 | 09 | 04 | 06 | 07 | 06 | 06 | 04 | 01  | 07                        | 03     | 01                       |
| 78.71                    | 03 | 08 | 05 | 07 | 05 | 04 | 06 | 05 | 05 | 04 | 05 | 05 | 02 | 06 | 06 | 05 | 01  | 11                        | 08     | 01                       |
| 78.64                    | 02 | 05 | 02 | 08 | 04 | 08 | 03 | 06 | 06 | 02 | 05 | 07 | 06 | 06 | 04 | 08 | 01  | 06                        | 09     | 01                       |
| 78.26                    | 07 | 10 | 09 | 05 | 05 | 07 | 09 | 10 | 03 | 04 | 05 | 04 | 05 | 08 | 09 | 02 | 01  | 06                        | 06     | 02                       |
| 77.92                    | 06 | 08 | 04 | 01 | 05 | 04 | 02 | 07 | 04 | 04 | 05 | 08 | 02 | 07 | 05 | 10 | 02  | 10                        | 09     | 01                       |
| 74.00                    | 02 | 02 | 03 | 04 | 03 | 04 | 01 | 05 | 08 | 04 | 05 | 10 | 03 | 09 | 06 | 09 | 01  | 06                        | 10     | 02                       |
| 69.58                    | 04 | 09 | 04 | 03 | 06 | 06 | 04 | 06 | 06 | 07 | 05 | 09 | 01 | 07 | 10 | 08 | 01  | 07                        | 04     | 01                       |



Table 3  
CORRELATION MATRIX

| TASK | Task 1 | A 2     | B 3     | C 4     | E 5     | F 6     | G 7     | H 8     | I 9     | L 10    |
|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A    | 1      | 1.0000  |         |         |         |         |         |         |         |         |
| B    | 2      | 0.1521  | 1.0000  |         |         |         |         |         |         |         |
| C    | 3      | 0.0405  | 0.0068  | 1.0000  |         |         |         |         |         |         |
| D    | 4      | 0.2987  | 0.4264  | 0.0036  |         |         |         |         |         |         |
| E    | 5      | 0.1298  | -0.1154 | 0.0104  | 1.0000  |         |         |         |         |         |
| F    | 6      | 0.0632  | 0.1810  | 0.0390  | 0.2946  | 1.0000  |         |         |         |         |
| G    | 7      | 0.2398  | 0.0749  | 0.1729  | -0.1666 | -0.0313 | 1.0000  |         |         |         |
| H    | 8      | 0.2452  | 0.2449  | 0.0618  | 0.4500  | 0.4822  | 0.1393  | 1.0000  |         |         |
| I    | 9      | 0.0018  | 0.1995  | 0.0511  | -0.1275 | -0.0186 | 0.2372  | 0.1127  | 1.0000  |         |
| L    | 10     | -0.2090 | -0.3296 | -0.1011 | 0.3269  | 0.0381  | -0.2385 | 0.0433  | -0.0624 | 1.0000  |
| M    | 11     | -0.0664 | 0.0947  | 0.0589  | -0.0815 | 0.1613  | -0.1478 | 0.1233  | 0.2446  | 0.0601  |
| N    | 12     | 0.0649  | -0.1822 | -0.1547 | -0.2064 | -0.3208 | -0.1491 | -0.2161 | -0.0704 | -0.2678 |
| O    | 13     | -0.3212 | -0.3135 | -0.6601 | -0.1132 | -0.2203 | -0.1250 | -0.4750 | -0.1901 | 0.3265  |
| Q1   | 14     | 0.0224  | 0.1342  | 0.1438  | 0.3424  | 0.3084  | -0.1870 | 0.1246  | 0.1678  | 0.0399  |
| Q2   | 15     | -0.0658 | -0.3421 | -0.2117 | -0.0858 | -0.5024 | 0.0505  | -0.2913 | 0.1112  | 0.1401  |
| Q3   | 16     | 0.1781  | 0.2706  | 0.4140  | -0.1782 | 0.0176  | 0.4878  | 0.2529  | 0.2933  | -0.2841 |
| Q4   | 17     | -0.2017 | -0.3943 | -0.7950 | -0.1772 | -0.3257 | -0.1740 | -0.5142 | -0.1316 | 0.3806  |

|    | M 11 | N 12    | O 13    | Q1 14   | Q2 15  | Q3 16   | Q4 17  |
|----|------|---------|---------|---------|--------|---------|--------|
| M  | 11   | 1.0000  |         |         |        |         |        |
| N  | 12   | -0.1102 | 1.0000  |         |        |         |        |
| O  | 13   | -0.1915 | -0.1414 |         |        |         |        |
| Q1 | 14   | 0.2873  | -0.1512 | 1.0000  |        |         |        |
| Q2 | 15   | -0.1604 | 0.2136  | -0.2393 | 1.0000 |         |        |
| Q3 | 16   | -0.0390 | 0.0594  | -0.3008 | 0.0059 | 1.0000  |        |
| Q4 | 17   | -0.2097 | 0.0720  | -0.1987 | 0.2723 | -0.3944 | 1.0000 |

Table 4  
Analysis of Variance

|  |                |                      |                  |                   |
|--|----------------|----------------------|------------------|-------------------|
| Step No. 1   |                |                      |                  |                   |
| Variable Entered   | 0              | 13                   |                  |                   |
| Multiple R   | 0.3212         |                      |                  |                   |
| Multiple R-Square  | 0.1032         |                      |                  |                   |
| Std. Error of Est.   | 5.9947         |                      |                  |                   |
| Analysis of Variance   |                |                      |                  |                   |
|  | Sum of Squares | DF                   | Mean Square      | F Ratio           |
| Regression   | 202.55203      | 1                    | 202.5520         | 5.636             |
| Residual   | 1760.8948      | 49                   | 35.93661         |                   |
| VARIABLES IN EQUATION  |                |                      |                  |                   |
| Variable   | Coefficient    | Std. Error of Coeff. | Std. Reg. Coeff. | F to Remove Level |
| (Y-Intercept   | 94.838)        |                      |                  |                   |
| 0  | -0.996         | 0.420                | -0.321           | 5.636             |
|  |                |                      |                  | 1                 |
| F-Levels (2.500, 2.500) or Tolerance Insufficient for Further Stepping |                |                      |                  |                   |

Table 4 (continued)

| VARIABLES NOT IN EQUATION |    |                     |
|---------------------------|----|---------------------|
| Variable                  |    | Partial Correlation |
| A                         | 2  | 0.05717             |
| B                         | 3  | 0.04994             |
| C                         | 4  | 0.12184             |
| E                         | 5  | 0.09933             |
| F                         | 6  | -0.00818            |
| G                         | 7  | 0.21250             |
| H                         | 8  | 0.11119             |
| I                         | 9  | -0.06378            |
| L                         | 10 | -0.11635            |
| M                         | 11 | -0.13765            |
| N                         | 12 | 0.02079             |
| Q <sub>1</sub>            | 14 | 0.02475             |
| Q <sub>2</sub>            | 15 | -0.02163            |
| Q <sub>3</sub>            | 16 | 0.07284             |
| Q <sub>4</sub>            | 17 | 0.07189             |



In addition to the multiple regression analysis reported above, a t-test was used to determine if there were any differences between male teachers and female teachers in regard to the mean-percentage of time-on-task for the teacher's classroom. Male teachers had a mean of 89.2 percent of children on-task, while female teachers had a mean of 88.6 percent of children on-task. The t-statistics for these differences was non-significant at  $p=.10$ , two-tailed test. Since subjects in this sample had come in part from a pool selected by the school's principal and in part by teacher volunteer and author request processes, a comparison of means from these two groups was also attempted. The mean for the principal selected pool was 90.2, while the mean for the teacher/author selected pool of subjects was 88.5, which was not significantly different.

The percentage-of-children-on-task scores were uniformly high, which might mask possible relationships between the dependent variable and the various independent variables. As a means of counteracting this potential problem, the investigator decided to intensively study the responses of the five highest time-on-task teachers in contrast to the five lowest time-on-task teachers. (See Table 5, page 27.) Three descriptors, C, G, and O, had a marked difference  $\leq 2$ . The differences suggest that the named variables represent a meaningful difference between high and low time-on-task teachers. The differences

Table 5

Mean Score Comparison of Personality Factors  
of Five Highest and Five Lowest Teachers

| Low Score<br>Description | High Score<br>Description | Factor         | Low<br>Score<br>Teacher | High<br>Score<br>Teacher |
|--------------------------|---------------------------|----------------|-------------------------|--------------------------|
| Reserved                 | Outgoing                  | A              | 4.2                     | 5.6                      |
| Less Intelligent         | More Intelligent          | B              | 6.8                     | 7.2                      |
| Affected by<br>Feelings  | Emotionally<br>Stable     | C              | 4.4                     | 7.0                      |
| Humble                   | Assertive                 | E              | 4.2                     | 6.0                      |
| Sober                    | Happy-Go-<br>Lucky        | F              | 4.6                     | 5.5                      |
| Expedient                | Conscientious             | G              | 5.8                     | 7.8                      |
| Shy                      | Venturesome               | H              | 3.8                     | 5.8                      |
| Tough-Minded             | Tender-Minded             | I              | 6.8                     | 7.0                      |
| Trusting                 | Suspicious                | L              | 5.4                     | 3.6                      |
| Practical                | Imaginative               | M              | 4.2                     | 5.5                      |
| Forthright               | Astute                    | N              | 5.0                     | 6.4                      |
| Self-Assured             | Apprehensive              | O              | 7.6                     | 5.2                      |
| Conservative             | Experimenting             | Q <sub>1</sub> | 3.4                     | 3.4                      |
| Group-Dependent          | Self-Sufficient           | Q <sub>2</sub> | 7.4                     | 6.8                      |
| Self-Conflict            | Controlled                | Q <sub>3</sub> | 6.8                     | 8.4                      |
| Relaxed                  | Tense                     | Q <sub>4</sub> | 7.4                     | 5.6                      |

indicated tendencies of emotional stability and calmness, persistence, and self-assurance for the high time-on-task teacher. For the low time-on-task teacher, the differences indicated tendencies of emotionality, expediency, and insecurity. Standard scores of the two groups, however, were not extreme.

## Chapter V

### DISCUSSION

The regression analysis supported a linear relationship between teacher self-assurance and student task maintenance, significant at the .05 level. However, this correlation was only one of many possible relationships affecting the dependent variable.

When differences between high and low task teachers were examined, variables C, G, and O suggested a measurable difference in personality. (See Table 5, page 27.) They measure emotionality, expediency versus conscientiousness, and self-assurance versus apprehension, respectively.

It was interesting to note that Factor I (tough-minded versus tender-minded) was positively skewed to a high degree. Only eleven scores, 22 percent, fell below the fiftieth percentile.

The subjects, as a whole, saw themselves as very conscientious (Factor G). The standard scores were above average ( $\geq 7$ ) for 49 percent of the sample.

Factor B (less-intelligent versus more-intelligent) was positively skewed. This was expected because the criterion for determining standard scores was drawn from a general population. The sample was a select group of educators.

Four norm tables, furnished with the test, were used to convert raw scores to standard scores. The norms differentiated sex and age. There was a significant difference ( $\leq 3$ ) in Factor B when different age norms were used. (The age 21 table skews intelligence scores in the negative direction relative to the age 35 table.)

It was interesting that in some schools there was a cohesiveness of scores on four to eight of the factors tested. In several cases, teachers within a school saw themselves as did fellow teachers. Scores on several variables were nearly the same (standard score range =  $\geq 3$ ) for all teachers in that school.

In view of the data brought forth by the study, the writer concluded that the subjects held several major traits in common. They possessed, as well, a wide range of thinking on other qualities. The author concluded that some schools appeared to have "personalities," as reflected by the high degree of similar traits of teachers in those schools. Certain teacher personality characteristics affect, to a small degree, how well students give attention-to-task.

The elusive nature of personality made for a most interesting study. Like other studies in the field of psychology, only a "gray" profile of the effective teacher could be drawn. Factors in the study restricted clearer conclusions. They were the well known limitations of



paper and pencil tests in measuring the intangible, and the narrow range of the attention-to-task measure.

In light of the information brought forth by the study, the author suggested areas for further investigation. Recommendations follow.

## RECOMMENDATIONS

Following are suggestions for further investigations in the general area of this study:

1. *Use of additional personality instruments.*

Employment of other personality measurement and assessment tools would broaden the scope of potentially significant variables.

2. *Replication with sample balanced with respect to race and gender.* The present study did not include in its sample ample representation of male and minority teachers. It is important to have information on all educators.

3. *In-depth study of selected personality characteristics.* Results were highly skewed on several factors. These descriptors could be investigated from several perspectives.

4. *In-depth study of response patterns.* Teacher responses tended to cluster in some schools. Investigation might explain the cause and/or effect of such patterns.

5. *In-depth study of 0 factors.* Further investigations should be made of teachers with extreme 0 (factor) scores.

## BIBLIOGRAPHY

- Anderson, Donald D. "Personality Attributes of Teachers in Organizational Climates," *Journal of Educational Research*, 62:441-443, July-August, 1969.
- Amidon, E., and N. A. Flanders. "The Effects of Direct and Indirect Teacher Influence on Dependent-Prone Students Learning Geometry," *Journal of Educational Psychology*, 52:286-291, December, 1961.
- Barr, A. S. "Recruitment for Teacher Training and Prediction of Teaching Success," *Review of Educational Research*, 40:185-190, June, 1970.
- \_\_\_\_\_. (ed.) *Teacher Effectiveness*. Madison: Dembar Publications, Inc., 1961.
- Boy, Angelo V., and Gerald J. Pine. *Expanding the Self Personal Growth for Teachers*. Dubuque, Iowa: Wm. C. Brown Publishers, 1971.
- Cattell, R. P., H. W. Eber, and M. M. Tatsuoka. *Handbook for the Sixteen Personality Factor Questionnaire*. Champaign, Illinois: Institute for Personality and Ability Testing, 1970.
- Combs, Arthur W., and others. *The Professional Education of Teachers, A Humanistic Approach to Teacher Preparation*. Boston: Allyn and Bacon, Inc., 1974.
- Dodge, Arthur F. "What Are the Personality Traits of the Successful Teachers?," *Journal of Applied Psychology*, 27:325-337, August, 1943.
- Doyal, Guy L., and Robert A. Forsyth. "The Relationship between Teacher and Student Anxiety Levels," *Psychology in the Schools*, 10:231-232, April, 1973.
- Gage, N. L. (ed.) *Handbook of Research on Teaching*. Chicago: Rand McNally & Co., 1963.
- Goldrich, Leon W. "Influences of Teacher Personality upon Pupil Adjustment," *Education*, 57:257-263, January, 1937.
- Guba, E. G., and J. W. Getzels. "Personality and Teacher Effectiveness: A Problem in Theoretical Research," *Journal of Educational Psychology*, 46:330-344, October, 1955.

- Heber, Audrey, and Richard P. Runyon. *General Statistics*. Reading, Massachusetts: Addison-Wesley, 1974.
- Hamachek, Don E. "Personality Styles and Teacher Behavior," *Educational Forum*, 36:313-322, March, 1972.
- Handley, George D. *Personality, Learning and Teaching*. London: Routledge & Kegan Paul, 1973.
- Lamke, Tom Arthur. "Personality and Teaching Success," *Journal of Experimental Education*, 20:217-259, December, 1951.
- Lewin, Kurt R., Ronald Lippitt, and Ralph K. White. "Patterns of Aggressive Behavior in Experimentally Created Social Climates," *Journal of Social Psychology*, 10: 271-299, May, 1939.
- McClain, Edwin W. "Sixteen PF Scores and Success in Student Teaching," *Journal of Teacher Education*, 19:25-32, Spring, 1968.
- Morris, John D. "Personality and Student Teaching Success," *Journal of Experimental Education*, 43:15-20, Summer, 1975.
- Ryans, David G. *Characteristics of Teachers*. Washington, D.C.: American Council on Education, 1960.
- Symonds, Percival M. "Personality of the Teacher," *Journal of Educational Research*, 40:652-661, May, 1947.
- Webb, Dwight. "Teacher Sensitivity: Affective Impact on Students," *The Journal of Teacher Education*, 22:255-259, Winter, 1971.
- Witty, Paul. "An Analysis of the Personality Traits of the Effective Teacher," *Journal of Educational Research*, 40:662-671, May, 1947.

APPENDIX A  
Handwriting Lesson One

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-- J -- <sup>1</sup> <sup>2</sup> -- <sup>3</sup> <sup>4</sup> J <sup>5</sup> J --

-- Texas --

--- Frank ---

--- Today we went to Tom's. ---

--- Finally it's Friday! ---

--- Tina Fleck has a kite. ---

Thirty days has September,  
April, June, and November;  
All the rest have thirty-one,  
Excepting February alone,  
Which has but twenty eight.

APPENDIX E

Task Chart

Room \_\_\_\_\_

Age Range \_\_\_\_\_

Grade \_\_\_\_\_

Number of Students \_\_\_\_\_

Participating \_\_\_\_\_

|                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------------|---|---|---|---|---|---|---|---|---|----|
| Number of Students On-Task |   |   |   |   |   |   |   |   |   |    |



# APPENDIX F

## 16 PF Test Profile

| LOW SCORE DESCRIPTION   | FACTOR         | HIGH SCORE DESCRIPTION  |
|---|----------------|---|
| RESERVED, Detached, Critical, Aloof, Stiff (Sizothymia)   | A              | OUTGOING, Warmhearted, Easy-going, Participating (Affectathymia)                                |
| LESS INTELLIGENT, Concrete-thinking (Lower scholastic mental capacity)                          | B              | MORE INTELLIGENT, Abstract-thinking, Bright (Higher scholastic mental capacity)                 |
| AFFECTED BY FEELINGS, Emotionally Less Stable, Easily Upset, Changeable (Lower ego strength)    | C              | EMOTIONALLY STABLE, Mature, Faces Reality, Calm (Higher ego strength)                           |
| HUMBLE, Mild, Easily Led, Docile, Accommodating (Submissiveness)                                | E              | ASSERTIVE, Aggressive, Stubborn, Competitive (Dominance)  |
| SOBER, Taciturn, Serious (Desurgency)   | F              | HAPPY-GO-LUCKY, Enthusiastic (Surgency)   |
| EXPEDIENT, Disregards Rules (Weaker superego strength)  | G              | CONSCIENTIOUS, Persistent, Moralistic, Staid (Stronger superego strength)                       |
| SHY, Timid, Threat-Sensitive (Threctia)   | H              | VENTURESOME, Uninhibited, Socially Bold (Parmia)  |
| TOUGH-MINDED, Self-Reliant, Realistic (Harria)  | I              | TENDER-MINDED, Sensitive, Clinging, Overprotected (Premsia)                                     |
| TRUSTING, Accepting Conditions (Alaxia)   | L              | SUSPICIOUS, Hard to Fool (Protension)   |
| PRACTICAL, "Down-to-Earth" Concerns (Praxemia)  | M              | IMAGINATIVE, Bohemian, Absent-minded (Autia)  |
| FORTHRIGHT, Unpretentious, Genuine but Socially Clumsy (Artlessness)                            | N              | ASTUTE, Polished, Socially Aware (Shrewdness)   |
| SELF-ASSURED, Placid, Secure, Complacent, Serene (Untroubled adequacy)                          | O              | APPREHENSIVE, Self-reproaching, Insecure, Worrying, Troubled (Guilt proneness)                  |
| CONSERVATIVE, Respecting Traditional Ideas (Conservatism of temperament)                        | Q <sub>1</sub> | EXPERIMENTING, Liberal, Free-thinking (Radicalism)  |
| GROUP-DEPENDENT, a "Joiner" and Sound Follower (Group adherence)                                | Q <sub>2</sub> | SELF-SUFFICIENT, Resourceful, Prefers Own Decisions (Self-sufficiency)                          |
| UNDISCIPLINED SELF-CONFLICT, Lax, Follows Own Urges, Careless of Social Rules (Low integration) | Q <sub>3</sub> | CONTROLLED, Exacting Will Power, Socially Precise, Compulsive (High strength of self-sentiment) |
| RELAXED, Tranquil, Unfrustrated, Composed (Low ergic tension)                                   | Q <sub>4</sub> | TENSE, Frustrated, Driven, Overwrought (High ergic tension)                                     |