

DOCUMENT RESUME

ED 067 414

TM 002 010

TITLE Teacher Aid, Elementary School (education)
099.368--Technical Report on Development of USES
Aptitude Test Battery.

INSTITUTION Manpower Administration (DOL), Washington, D.C. U.S.
Training and Employment Service.

REPORT NO TR-S-398

PUB DATE Oct 67

NOTE 22p.

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS *Aptitude Tests; *Cutting Scores; Elementary Schools;
Evaluation Criteria; Job Applicants; *Job Skills;
Norms; Occupational Guidance; Paraprofessional School
Personnel; *Personnel Evaluation; *Teacher Aides;
Test Reliability; Test Validity

IDENTIFIERS GATB; *General Aptitude Test Battery

ABSTRACT

The United States Training and Employment Service General Aptitude Test Battery (GATB), first published in 1947, has been included in a continuing program of research to validate the tests against success in many different occupations. The GATB consists of 12 tests which measure nine aptitudes: General Learning Ability; Verbal Aptitude; Numerical Aptitude; Spatial Aptitude; Form Perception; Clerical Perception; Motor Coordination; Finger Dexterity; and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, and a standard deviation of 20. Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, when combined, predict job performance. Cutting scores are set only for those aptitudes which aid in predicting the performance of the job duties of the experimental sample. The GATB norms described are appropriate only for jobs with content similar to that shown in the job description presented in this report. A description of the validation sample and a personnel evaluation form are also included. (AG)

ED 067414

TM 002 040

010

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

**Development of USES Aptitude Test Battery
for
Teacher Aid, Elementary School**

(education) 099-368

U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION

Technical Report on Development of USES Attitude Test Battery

For . . .

Teacher Aid, Elementary School (education) 099.368

S-398

(Developed in Cooperation with the
North Carolina State Employment Service)

U.S. DEPARTMENT OF LABOR
Willard Wirtz, Secretary

BUREAU OF EMPLOYMENT SECURITY
Robert C. Goodwin, Administrator

MANPOWER ADMINISTRATION
Stanley H. Ruttenberg,
Administrator

U.S. EMPLOYMENT SERVICE
Charles E. Odell, Director

October 1967

FOREWORD

The United States Employment Service General Aptitude Test Battery (GATB) was first published in 1947. Since that time the GATB has been included in a continuing program of research to validate the tests against success in many different occupations. Because of its extensive research base the GATB has come to be recognized as the best validated multiple aptitude test battery in existence for use in vocational guidance.

The GATB consists of 12 tests which measure 9 aptitudes: General Learning Ability, Verbal Aptitude, Numerical Aptitude, Spatial Aptitude, Form Perception, Clerical Perception, Motor Coordination, Finger Dexterity, and Manual Dexterity. The aptitude scores are standard scores with 100 as the average for the general working population, with a standard deviation of 20.

Occupational norms are established in terms of minimum qualifying scores for each of the significant aptitude measures which, in combination, predict job performance. For any given occupation, cutting scores are set only for those aptitudes which contribute to the prediction of performance of the job duties of the experimental sample. It is important to recognize that another job might have the same job title but the job content might not be similar. The GATB norms described in this report are appropriate for use only for jobs with content similar to that shown in the job description included in this report.

Charles E. Odell

Charles E. Odell, Director
U. S. Employment Service

DEVELOPMENT OF USES APTITUDE TEST BATTERY

For

Teacher Aid, Elementary School (education) 099.368-014

This report describes research undertaken for the purpose of developing General Aptitude Test Battery (GATB) norms for the occupation of **Teacher Aid, Elementary School**. The following norms were established:

GATB Aptitudes	Minimum Acceptable GATB, B-1002 Scores
N - Numerical Aptitude	75
Q - Clerical Perception	95
K - Motor Coordination	80

RESEARCH SUMMARY

Sample: 1 male and 77 females employed as Teacher Aids, by the Boards of Education in Forsyth, Bertie, and Montgomery Counties of North Carolina. *Sixty-four of these were identified as Negroes while the remainder were nonminority group members.*

Criterion: Supervisory ratings made on standard SP-21 descriptive rating scale with 47 persons in Bertie and on a SP-21 rating scale specifically constructed for the job of Teacher Aid with 31 persons in Forsyth and Montgomery Counties.

Design: Concurrent.

Minimum aptitude requirements were determined on the basis of a job analysis and statistical analyses of aptitude mean scores, standard deviations, aptitude-criterion correlations and selective efficiencies.

Concurrent Validity: Phi Coefficient = .43 ($P/2 < .0005$)

Effectiveness of Norms: Only 69% of the non-test-selected workers used for this study were good workers; if the workers had been test-selected with the above norms, 84% would have been good workers. 31% of the non-test-selected workers used for this study were poor workers; if the workers had been

test-selected with the above norms, only 16% would have been poor workers. The effectiveness of the norms is shown graphically in Table 1:

TABLE 1
Effectiveness of Norms

	Without Tests	With Tests
Good Workers	69%	84%
Poor Workers	31%	16%

SAMPLE DESCRIPTION

Size: N = 78

Occupational Status: Employed workers.

Work Setting: Classrooms and playgrounds of 6 elementary schools in Bertie County, 14 elementary schools in Forsyth County and 5 elementary schools in Montgomery County of North Carolina.

Selection Requirements:

Education: High school graduation.

Previous Experience: None required.

Tests: None used.

Other: Personal interview.

Principal Activities: The job duties for each worker are comparable to those shown in the job description in the appendix.

Minimum Experience: The training required is 3 months experience on the job.

TABLE 2

Means, Standard Deviations (SD), Ranges, and Pearson Product-Moment Correlations with the Criterion (r) for Age, Education, and Experience

	Mean	SD	Range	r
Age (years)	32.6	9.8	18-52	.051
Education (years)	12.8	1.2	12-16	.053
*Experience (months)	-	-	-	-

*As job has been in existence only this school year in this area, experience is the same for all individuals.

EXPERIMENTAL TEST BATTERY

All 12 tests of the GATB, B-1002B were administered to the sample group.

CRITERION

Independent ratings were made by various supervisors within two weeks of the date of testing.

Rating Scale: Standard SP-21 descriptive rating scale used with the portion of the sample consisting of 47 persons from Bertie County and a SP-21 type descriptive rating scale constructed specifically for this job used with 31 persons in the sample from Montgomery and Forsyth Counties. As there were nine items with a possible score of 45 on the standard SP-21 and ten items with a possible score of 50 on the specific SP-21, the raw scores of persons from Bertie County were multiplied by the constant of 1.111 to make all criterion scores quantitatively comparable.

Reliability: A Person Product-Moment correlation was computed between each total score minus the score of the final item and the score on each of the final items treated as broad category ratings. The correlation formula corrected for the Y variable expressed in broad categories yielded the result of .90 which indicates satisfactory criterion reliability based upon this considerable measure.

Criterion Distribution: The total scores of the supervisory ratings had a range of 17-45 with a mean of 38.2 and a standard deviation of 7.5.

Criterion Dichotomy: The criterion distribution was dichotomized into low and high groups by placing 31% of the sample in the low group to correspond with the percentage of workers considered unsatisfactory or marginal. Workers in the high criterion group were designated as "good workers" and those in the low group as "poor workers." The criterion critical score is 34.

APTITUDES CONSIDERED FOR INCLUSION IN THE NORMS

Aptitudes were selected for tryout in the norms on the basis of a qualitative analysis of job duties involved and a statistical analysis of test and criterion data. Aptitude V which does not have a high correlation with the criterion was considered for inclusion in the norms because the qualitative analysis indicated it was important for the job duties and the sample had a relatively low standard deviation on this aptitude. With employed workers, a relatively low standard deviation indicates that some sample preselection may have occurred. Tables 3, 4, and 5 show the results of the qualitative and statistical analyses.

TABLE 3
Qualitative Analysis
(Based on the job analysis, the aptitudes indicated appear to be important to the work performed)

Aptitude	Rationale
<u>V - Verbal Aptitude</u>	Necessary in understanding instructions and verbally communicating with students.
<u>N - Numerical Aptitude</u>	Necessary in arithmetical computations, scoring, grading, and averaging grades.
<u>Q - Clerical Perception</u>	Necessary in scoring tests by use of keys and performing a variety of clerical tasks.
<u>K - Motor Coordination</u>	Necessary in visually detecting errors and rapidly marking same, transposing scores, and in duplicating materials.

TABLE 4
Means, Standard Deviation (SD), and Pearson Product-Moment Correlations with the Criterion (r) for the Aptitudes of the GATB

Aptitudes	Mean	SD	Range	r
G-Intelligence	82.0	13.9	56-122	.248*
V-Verbal Aptitude	86.8	12.0	66-123	.121
N-Numerical Aptitude	82.7	16.7	55-132	.328**
S-Spatial Aptitude	86.6	16.3	58-137	.196
P-Form Perception	94.5	19.5	39-132	.297**
Q-Clerical Perception	105.6	13.8	79-141	.377**
K-Motor Coordination	108.4	16.1	70-142	.305**
F-Finger Dexterity	94.2	19.6	48-135	.141
M-Manual Dexterity	107.5	17.8	58-141	.247*

*Significant at the .05 level
**Significant at the .01 level

TABLE 5

Summary of Qualitative and Quantitative Data

Type of Evidence	Aptitudes								
	G	V	N	S	P	Q	K	F	M
Job Analysis Data: Important	X	X	X			X			
Irrelevant									
Relatively High Mean						X	X		X
Relatively Low SD	X	X				X			
Significant Correlation with Criterion	X		X		X	X	X		X
Aptitudes to be Considered for Trial Norms	X	X	X		X	X	X		X

DERIVATION AND VALIDITY OF NORMS

Final norms were derived on the basis of a comparison of the degree to which trial norms consisting of various combinations of Aptitudes G, V, N, P, Q, K, and M, at trial cutting scores were able to differentiate between the 69% of the sample considered good workers and 51% of the sample considered poor workers. Trial cutting scores at five point intervals approximately one standard deviation below the mean are tried because this will eliminate about one third of the sample with three-aptitude norms. For two-aptitude trial norms, minimum cutting scores of slightly more than one standard deviation below the mean will eliminate about one third of the sample; for four-aptitude trial norms, cutting scores of slightly less than one standard deviation below the mean will eliminate about one third of the sample. The Phi Coefficient was used as a basis for comparing trial norms. Norms of N-75, Q-95, and K-80 provided optimum differentiation. The validity of these norms is shown in Table 6 and is indicated by a Phi Coefficient of .43 (statistically significant at the .0005 level).

TABLE 6

Concurrent Validity of Test Norms N-75, Q-95, and K-80

	Nonqualifying Test Scores	Qualifying Test Scores	Total
Good Workers	12	42	54
Poor Workers	16	8	24
Total	28	50	78

Phi Coefficient (ϕ) = .43
Significance Level = $P/2 < .0005$

Chi Square (X^2) = 14.3

DETERMINATION OF OCCUPATIONAL APTITUDE NORMS

The data for this study did not meet the requirements for incorporating the occupation studied into any of the 36 OAP's included in Section II of the Manual for the General Aptitude Test Battery. The data for this sample will be considered for future groupings of occupations in the development of new occupational aptitude patterns.

SP-20

A-P-P-R-E-N-T-I-V

11-56

SUGGESTIONS TO RATERS

(For rating scale used in Bertie County)

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly confidential and won't affect your workers in any way. Neither the ratings nor test scores of any worker will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform this work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate him only on the way he does his work. Here are some more points which might help you:

1. Please read all directions and the rating scale thoroughly before rating.
2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.
3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A worker may be good in one ability and poor in another; for example, a very slow worker may be very accurate. So rate all workers on the first question, then rate all workers on the second question, and so on.
4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a faster worker than another with six years' experience. Don't rate one worker as poorer than another because he has not been on the job as long.
5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.
6. Rate only on the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

Please fill in the information requested on the reverse side of this sheet.

(job title, name of rater, company name and location and date)

SP-21
Rev. 2/61

DESCRIPTIVE RATING SCALE
(For Bertie County)

Score _____

RATING SCALE FOR _____
D. O. T. Title and Code

Directions: Please read Form SP-20, "Suggestions to Raters", and then fill in the items listed below. In making your ratings, only one box should be checked for each question.

Name of Worker (print) _____
(Last) (First)

Sex: Male _____ Female _____

Company Job Title: _____

How often do you see this worker in a work situation?

- See him at work all the time.
- See him at work several times a day.
- See him at work several times a week.
- Seldom see him in work situation.

How long have you worked with him?

- Under one month.
- One to two months.
- Three to five months.
- Six months or more.

A. How much work can he get done? (Worker's ability to make efficient use of his time and to work at high speed.)

- 1. Capable of very low work output. Can perform only at an unsatisfactory pace.
- 2. Capable of low work output. Can perform at a slow pace.
- 3. Capable of fair work output. Can perform at an acceptable but not a fast pace.
- 4. Capable of high work output. Can perform at a fast pace.
- 5. Capable of very high work output. Can perform at an unusually fast pace.

B. How good is the quality of his work? (Worker's ability to do high-grade work which meets quality standards.)

- 1. Performance is inferior and almost never meets minimum quality standards.
- 2. The grade of his work could stand improvement. Performance is usually acceptable but somewhat inferior in quality.
- 3. Performance is acceptable but usually not superior in quality.
- 4. Performance is usually superior in quality.
- 5. Performance is almost always of the highest quality.

C. How accurate is he in his work? (Worker's ability to avoid making mistakes.)

- 1. Makes very many mistakes. Work needs constant checking.
- 2. Makes frequent mistakes. Work needs more checking than is desirable.
- 3. Makes mistakes occasionally. Work needs only normal checking.
- 4. Makes few mistakes. Work seldom needs checking.
- 5. Rarely makes a mistake. Work almost never needs checking.

D. How much does he know about his job? (Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with his work.)

- 1. Has very limited knowledge. Does not know enough to do his job adequately.
- 2. Has little knowledge. Knows enough to "get by."
- 3. Has moderate amount of knowledge. Knows enough to do fair work.
- 4. Has broad knowledge. Knows enough to do good work.
- 5. Has complete knowledge. Knows his job thoroughly.

E. How much aptitude or facility does he have for this kind of work? (Worker's adeptness or knack for performing his job easily and well.)

- 1. Has great difficulty doing his job. Not at all suited to this kind of work.
- 2. Usually has some difficulty doing his job. Not too well suited to this kind of work.
- 3. Does his job without too much difficulty. Fairly well suited to this kind of work.
- 4. Usually does his job without difficulty. Well suited to this kind of work.
- 5. Does his job with great ease. Exceptionally well suited for this kind of work.

F. How large a variety of job duties can he perform efficiently? (Worker's ability to handle several different operations in his work.)

- 1. Cannot perform different operations adequately.
- 2. Can perform a limited number of different operations efficiently.
- 3. Can perform several different operations with reasonable efficiency.
- 4. Can perform many different operations efficiently.
- 5. Can perform an unusually large variety of different operations efficiently.

- G. How resourceful is he when something different comes up or something out of the ordinary occurs? (Worker's ability to apply what he already knows to a new situation.)
- 1. Almost never is able to figure out what to do. Needs help on even minor problems.
 - 2. Often has difficulty handling new situations. Needs help on all but simple problems.
 - 3. Sometimes knows what to do, sometimes doesn't. Can deal with problems that are not too complex.
 - 4. Usually able to handle new situations. Needs help on only complex problems.
 - 5. Practically always figures out what to do himself. Rarely needs help, even on complex problems.
- H. How many practical suggestions does he make for doing things in better ways? (Worker's ability to improve work methods.)
- 1. Sticks strictly with the routine. Contributes nothing in the way of practical suggestions.
 - 2. Slow to see new ways to improve methods. Contributes few practical suggestions.
 - 3. Neither quick nor slow to see new ways to improve methods. Contributes some practical suggestions.
 - 4. Quick to see new ways to improve methods. Contributes more than his share of practical suggestions.
 - 5. Extremely alert to see new ways to improve methods. Contributes an unusually large number of practical suggestions.
- I. Considering all the factors already rated, and only these factors, how acceptable is his work? (Worker's "all-around" ability to do his job.)
- 1. Would be better off without him. Performance usually not acceptable.
 - 2. Of limited value to the organization. Performance somewhat inferior.
 - 3. A fairly proficient worker. Performance generally acceptable.
 - 4. A valuable worker. Performance usually superior.
 - 5. An unusually competent worker. Performance almost always top notch.

TO THE TEACHER

(Instructions for Rating Scale used in Montgomery and Forsyth Counties)

You are being asked to rate your present teacher aide. Your rating of this individual is an important aspect of research, which is being conducted to develop standards for use in the selection of future teacher aides.

Give your honest opinion of this person's performance in his work. This rating is strictly confidential. Since neither the rating nor its results will be shown to anyone in the school system, it cannot affect your aide's standing in his job. When you have completed the form, seal it in the attached, addressed, postage paid envelope and mail it yourself.

Your prompt completion of this rating is necessary because no further action can be taken until the forms are received.

The success of this research depends on the true evaluation of each aide. Consequently, it is essential that you read the instructions below and follow them carefully.

INSTRUCTIONS:

1. On each question compare your aide's performance with other persons you have known doing the same task.
2. Consider each question separately. Don't let one outstanding trait affect your overall judgment. The items ask about different abilities. An aide may be good in one task and poor in another.
3. Rate him according to the work he has done over a period of time. Don't rate him just on the basis of one "good" day or one "bad" day. Think in terms of his usual or typical performance.
4. Consider only the factor you are being asked about in each question. Don't let traits such as cooperativeness, agreeableness, and punctuality influence your rating. Although these traits are important, they are not applicable to this phase of the study.
5. If for any reason you feel you are unable to evaluate and rate fairly this person, please make a brief statement of your reason on the form and return it in the attached envelope.

REMEMBER! THE VALUE OF FUTURE TEACHER AIDES TO YOUR PROFESSION MAY DEPEND ON THE ACCURACY OF THE RATING YOU ARE ABOUT TO MAKE.

DESCRIPTIVE RATING SCALE
Teacher Aide, Elementary School
(Used in Montgomery and Forsyth Counties)

Score _____

NAME OF AIDE _____
(Please Print)

Sex: Male _____ Female _____

Rated by _____, Teacher

School _____ Grade _____

Location _____ Date _____
(City)

Directions: Check one box for each question.

How often do you see this aide in a work situation?

- _____ See him at work all the time.
- _____ See him at work several times a day.
- _____ See him at work several times a week.
- _____ Seldom see him in work situation.

How long have you worked with him?

- _____ Under one month.
- _____ One to two months.
- _____ Three to five months.
- _____ Six months or more.

A. How accurate is he in his clerical activities?

- 1. Makes many mistakes. Work needs constant checking.
- 2. Makes frequent mistakes. Work needs more checking than is desirable.
- 3. Makes mistakes occasionally. Work needs only normal checking.
- 4. Makes few mistakes. Work seldom needs checking.
- 5. Rarely makes a mistake. Work almost never needs checking.

B. How well does he comprehend instructions and your teaching program?

- 1. Requires repeated direction and has great difficulty in understanding.
- 2. Needs some repetition of instruction and has some difficulty in understanding the methods.
- 3. With reasonable amount of instruction applies the plan without too much difficulty.
- 4. Generally understands principles with few directions having to be given to him.
- 5. Grasps plans and underlying principles with a minimum of guidance.

C. How large a variety of job duties can he perform efficiently?

- 1. Cannot perform enough different duties efficiently.
- 2. Can perform a limited number of different duties efficiently.
- 3. Can perform most different duties with reasonable efficiency.
- 4. Can perform practically all different duties efficiently.
- 5. Can perform every duty of teacher aide efficiently.

D. How much help does the aide give in planning displays, bulletin boards, and special projects?

- 1. Contributes nothing.
- 2. Contributes a useful idea occasionally.
- 3. Contributes some good ideas.
- 4. Contributes more than the average number of good ideas.
- 5. Contributes an unusually large number of superior ideas.

E. How much aptitude or knack does he have for performing clerical tasks?

- 1. Has great difficulty doing clerical tasks. Not at all suited for this kind of work.
- 2. Usually has some difficulty doing clerical tasks. Not too well suited for this kind of work.
- 3. Does clerical tasks without too much difficulty. Fairly well suited for this kind of work.
- 4. Usually does clerical tasks without difficulty. Well suited for this kind of work.
- 5. Does clerical tasks with great ease. Exceptionally well suited for this kind of work.

F. How resourceful is he when something different comes up or something out of the ordinary occurs? (Worker's ability to apply what he already knows to a new situation).

- 1. Almost never is able to figure out what to do. Needs help on even minor problems.
- 2. Often has difficulty handling new situations. Needs help on all but simple problems.
- 3. Sometimes knows what to do, sometimes doesn't. Can deal with problems that are not too complex.
- 4. Usually able to handle new situations. Needs help on only complex problems.
- 5. Practically always figures out what to do himself. Rarely needs help, even on complex problems.

G. How well does he handle and operate the equipment such as recorders, projectors, and duplicating machines?

- 1. Great difficulty in actual operating and very little knowledge about the apparatus.
- 2. Some difficulty in the operations and lacks some desired knowledge of equipment.
- 3. Generally operates without difficulty and has satisfactory amount of knowledge.
- 4. Rarely has any difficulty in operating the equipment with more than the usual knowledge of the apparatus.
- 5. Complete ease in operation and thorough technical knowledge.

H. How aware of children's behavior (individually and in group) is he?

- 1. Does not notice things even as they happen.
- 2. Usually observes things as they happen.
- 3. Observes things as they happen and occasionally anticipates behavior before it occurs.
- 4. Observes things as they happen and often predicts behavior.
- 5. Observes events and is usually able to anticipate children's behavior.

I. How well does he use words in his work - in directing children, making explanations, reading, etc.?

- 1. Knowledge and use of words very unsatisfactory.
- 2. Knowledge and use of words less than desired for work of teacher aide.
- 3. Adequate command of words and ability to use them in the duties of assisting a teacher.
- 4. Knowledge and use of vocabulary better than average.
- 5. Superior use of language.

J. Considering all the factors already rated, and only these factors, how acceptable is his work? (Worker's "all-around" ability to do his job.)

- 1. Would be better off without him. Performance usually not acceptable.
- 2. Of limited value to the organization. Performance somewhat inferior.
- 3. A fairly proficient worker. Performance generally acceptable.
- 4. A valuable worker. Performance usually superior.
- 5. An unusually competent worker. Performance almost always top notch.

October 1967

S-398

FACT SHEET

Job Title: Teacher Aid, Elementary School (education) 099.368-014

Job Summary: Performs non-professional tasks to assist elementary school teacher: Operates audio-visual aid equipment and supervises lunchroom and physical education activities to allow teacher more time to plan and evaluate classroom activity. Works with and encourages slower groups needing additional assistance by reviewing assigned exercises or listening to reading assignments.

Work Performed:

1. Supervises children during the breakfast and lunch periods:
 - (a) Guides children to and from the cafeteria to minimize disturbances and to assure that each child eats his food in an orderly manner during the time allotted for meals.
2. Prepares for the work day:
 - (a) Checks with teacher to receive instructions for the day.
 - (b) Sharpens pencils, opens windows on warm days, and arranges chairs, desks and tables for the day.
 - (c) Waters plants and feeds small animals such as hamsters, turtles, snakes, and fish which are kept in the classroom for the children.
3. Performs clerical duties:
 - (a) Corrects tests using a sample answer form or sheet furnished by the teacher to assure uniformity in grading.
 - (b) Transfers grades from the register to report cards.
 - (c) Obtains supplies including reference and resource materials from the library or stock room for class use.
 - (d) Prepares charts and flash cards as directed by the teacher to supplement classroom instruction.
4. Operates machines:
 - (a) Sets up and operates audio-visual aid equipment such as tape recorders, record players, and movie and slide projectors used in the classroom for instructional purposes.
 - (b) Operates mimeograph and duplicating machines to reproduce tests and other materials used in the classroom.
5. Assists teacher in the classroom:
 - (a) Distributes to the children and collects writing paper, pencils and books used during the lessons.
 - (b) Using lesson plan, gives instructions concerning past assignments to pupils who have been absent.
 - (c) Gives individualized attention to pupils who fail to understand the teacher's instructions.
 - (d) Works with groups, usually in the back of the room, who are experiencing difficulty in such areas as penmanship, words or reading by giving writing exercises, using flash cards and listening to reading practice.
 - (e) Checks to determine if arithmetic and spelling exercises are done correctly.

- (f) Supervises pupils if the teacher leaves the room.
 - (g) Takes sick pupil to first aid room, calls parent, and, if necessary, drives child home.
 - (h) Reads to the class from a designated story book.
 - (i) Escorts groups of either boys or girls to and from the rest rooms.
 - (j) Helps in classroom clean-up activity, seeing that the children remove paper and trash from their desks and dispose of same in the trash can.
6. Supervises physical education class by directing and sometimes participating in play activity.
7. Prepares for close of school day:
- (a) Empties pencil sharpener, closes windows and waters flowers.
 - (b) Returns materials to the library or stock room.

Effectiveness of Norms:

Only 69% of the non-test-selected workers used for this study were good workers; if the workers had been test-selected with the ⁵⁻³⁷⁸ ~~above~~ norms, 84% would have been good workers. 31% of the non-test-selected workers used for this study were poor workers; if the workers had been test-selected with the above norms, only 16% would have been poor workers.

Applicability of ⁵⁻³⁷⁸ ~~5-378~~ Norms:

The aptitude test battery is applicable to jobs which include a majority of duties described above.

