

# PEER-COMPARISON PERCENT AND FREQUENCY

## SCORES FOR GRADES 8, 9, AND 10

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### Introduction

Perennial problems in secondary compensatory education are 1) determining which students should be enrolled in the remedial program and 2) setting static aims for these students. Exactly what constitutes an acceptable percent score or correct/error frequency for a particular academic behaviour at a certain grade level is difficult to intuit. A number of solutions have been suggested (Haring, Lovitt, Eaton & Hansen, 1978), and the one addressed in this paper is that of peer-comparison (White & Haring, 1976). The procedure involves surveying a small group of "average" students at various secondary grade levels in order to determine how well -- or how poorly -- they perform on the academic tasks that are of interest. The data gleaned from such a survey would enable the instructor to decide upon an acceptable percent or frequency instead of having to resort to the blanket  $\times 1.25$  for corrects and  $/1.25$  for errors when setting dynamic aims.

Recently there have been attempts to gather such data with an elementary-aged population (Howell, 1979a, 1979b; Gentry & Clark, 1979), but little has been done at the junior secondary or middle school level. Hopefully, the data contained in this article will help to fill in this gap.

Another important use for the data would be as a screening instrument -- i.e., as a means of identifying those students who should be involved in the school compensatory program. Standardized tests are useful for placement and prediction (Estes & Vangh, 1978), but they have little or no diagnostic value. In contrast, the peer-comparison figures presented here would also be useful in pinpointing specific tasks when establishing a remedial program for a student. Administration of the screening instrument would take approximately 130 minutes (115 minutes of actual testing and 15 minutes of directions, etc.), and the results would complement teacher referrals, past achievement records, etc.

One final point should be emphasized. The question that was constantly being asked when the content of the survey material was being decided upon was the following: What are those skill/movement combinations most commonly employed in secondary teaching situations? In other words, do the skill/movement combinations that have been pinpointed reflect the combinations that are necessary for success in the "typical" secondary classroom? The results of the author's compilations are presented below.

### Method

#### Subjects

The S's were approximately 60 grade 8, 9 and 10 students of "average" ability in the curriculum areas of language, arts and mathematics. All students were in attendance at the same average-sized, rural junior secondary school in British Columbia. Selection procedures involved having subject teachers

nominate students of average ability in their respective courses (English and Mathematics), and the choices were corroborated by a check of the permanent record cards (students with a history of "C" letter grades were prime candidates). The S's were "put through their paces" in late January -- i.e., approximately the mid-point of the academic year.

### Description of Tasks

Obviously, any list of academic tasks that one wished to classify as "basic" or "fundamental" would most likely be both varied and extensive. Nevertheless, it seems reasonable to assume that there is indeed some combination of skills and movements in different subject areas which would form an integral part of a junior high school student's repertoire of academic behaviours. Accordingly, the author decided that information regarding some of these basic tasks would be helpful in the setting of static aims for less able students. These tasks are presented in Tables 1 and 2.

MOVEMENT		LANGUAGE ARTS	MATHEMATICS
See-to say	S-S	-	1
See-to-mark	S-M	2	-
See-to-write	S-W	3	13
Hear-to-say	H-S	1	1
Hear-to-mark	H-M	-	-
Hear-to-write	H-W	3	1
Writes words	-	1	-
Writes numbers	-	-	-
TOTAL		10	17

Table 1. Breakdown of Movement Types

		DESCRIPTION OF TASK	MVT	MIN.	%	FREQUENCY
Reading	1	Cloze Passage *	S-W	"20"	/	
	2	Comprehension Passage *	S-W	"20"	/	
	3	Listening Passage *	H-W	"20"	/	
Spelling	4	Spell Words *	H-S	"2"	/	
	5	Spell Words *	H-W	2		/
	6	Mark Misspelled Words	S-M	"4"	/	
Compositional Writing	7a	Compose Total Words				number
	7b	Paragraph Desc. Adj.	-	"5"	/	
	7c	(10 sent) Adverbs			/	
	7d	Action Verbs			/	
	8	Mark errors in paragraph	S-M	5		/
Handwriting	9	Copy Paragraph	S-W	"5"	/	Likert
	10	Dictated Paragraph	H-W	3		Scale /
Mathematics	11	Read Numbers	S-S	"2"	/	
	12	Addition	S-W	3		/
	13	Subtraction	S-W	3		/
	14	Multiplication	S-W	3		/
	15	Division	S-W	3		/
	16	Per Cent	S-W	3		/
	17	Decimals (+)	S-W	1		/
	18	Decimals (-)	S-W	1		/
	19	Decimals (x)	S-W	1		/
	20	Decimals (/)	S-W	1		/
	21	Fractions (+)	S-W	1		/
	22	Fractions (-)	S-W	1		/
	23	Fractions (x)	S-W	1		/
	24	Fractions (/)	S-W	1		/
25	Multiplication Tables	H-S	1		/	
26	Numbers Written	-	1		/	
27	Mental Arithmetic	H-W	2		/	

TOTAL                    115 Min.

\* Differs for each grade level  
 " " Approximate time required

Table 2. Description of tool skills/movements

## Results

Median and range scores for the tasks outlined in Table 2 are displayed in Charts 1 through 4. The numbers at the bottom of the Charts indicate the number of the task (see Table 2).

## Conclusion

In summary, it is hoped that the proposed instrument would be helpful to secondary teachers for two purposes: 1) as a means of selecting students for a secondary compensatory education program, and 2) as a method of determining percent and frequency scores for the setting of static aims.

Advantages appear to be that administration of the instrument is short (150 minutes) and that a large amount of data regarding a student's ability would be generated. In addition, information concerning various movement cycles is also produced. Disadvantages are that the peer-comparison scores are school-referenced and hence not norm-referenced via statistical analysis (e.g. split-half reliability) and that -- perhaps -- the spectrum of tasks is not broad enough. Hopefully, the advantages outweigh the disadvantages.

(Note: For a description of the individual tasks presented in Table 2, please write the author, c/o P.O. Box 130, Rosedale, B.C. Canada V0X 1X0.)

## References

- Estes, T. H. & Vaughn, J. Reading and learning in the content classroom. Boston: Allyn and Bacon, 1978.
- Gentry, D. & Clark, M. Intake procedures at the experimental education unit. In T. C. Lovitt & N. G. Haring (Eds.), Classroom application of precision teaching. Seattle: Special Child Publications, 1979.
- Haring, N.G.; Lovitt, T.C.; Eaton, M.D.; & Hansen, C.L. The fourth R: Research in the classroom. Columbus: Charles E. Merrill Company, 1978.
- Howell, K.; Kaplan, J.; & O'Connell, C. Evaluating exceptional children. Columbus: Charles E. Merrill Company, 1979 (a).
- Howell, J. & Kaplan, J. Diagnosing basic skills: A handbook for deciding what to teach. Columbus: Charles E. Merrill Company, 1979 (b).
- White, O. R. & Haring, N. G. Exceptional teaching. Columbus: Charles E. Merrill Company, 1976.

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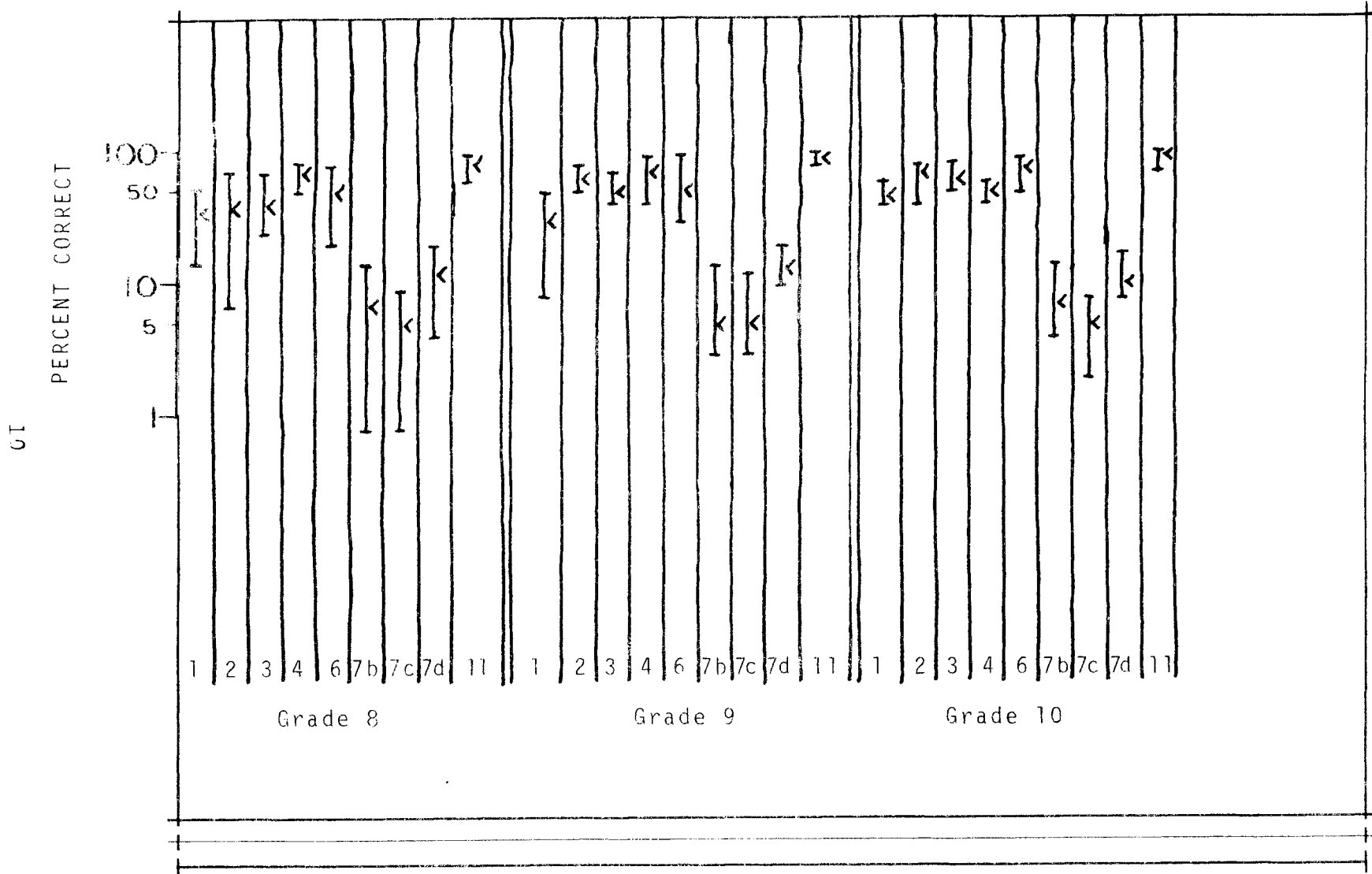


Chart 1. Median and range percent scores for the tasks outlined in Table 2-grades 8,9,10.

T. Jones \_\_\_\_\_ students \_\_\_\_\_ numbered  
Rosedale Junior Secondary School Rosedale, British Columbia \_\_\_\_\_ tasks

Jones, Thomas. Peer-comparison percent and frequency scores for grades 8,9, and 10. *Journal of Peer-Relation Research*, Volume I, Number 4, January, 1981.

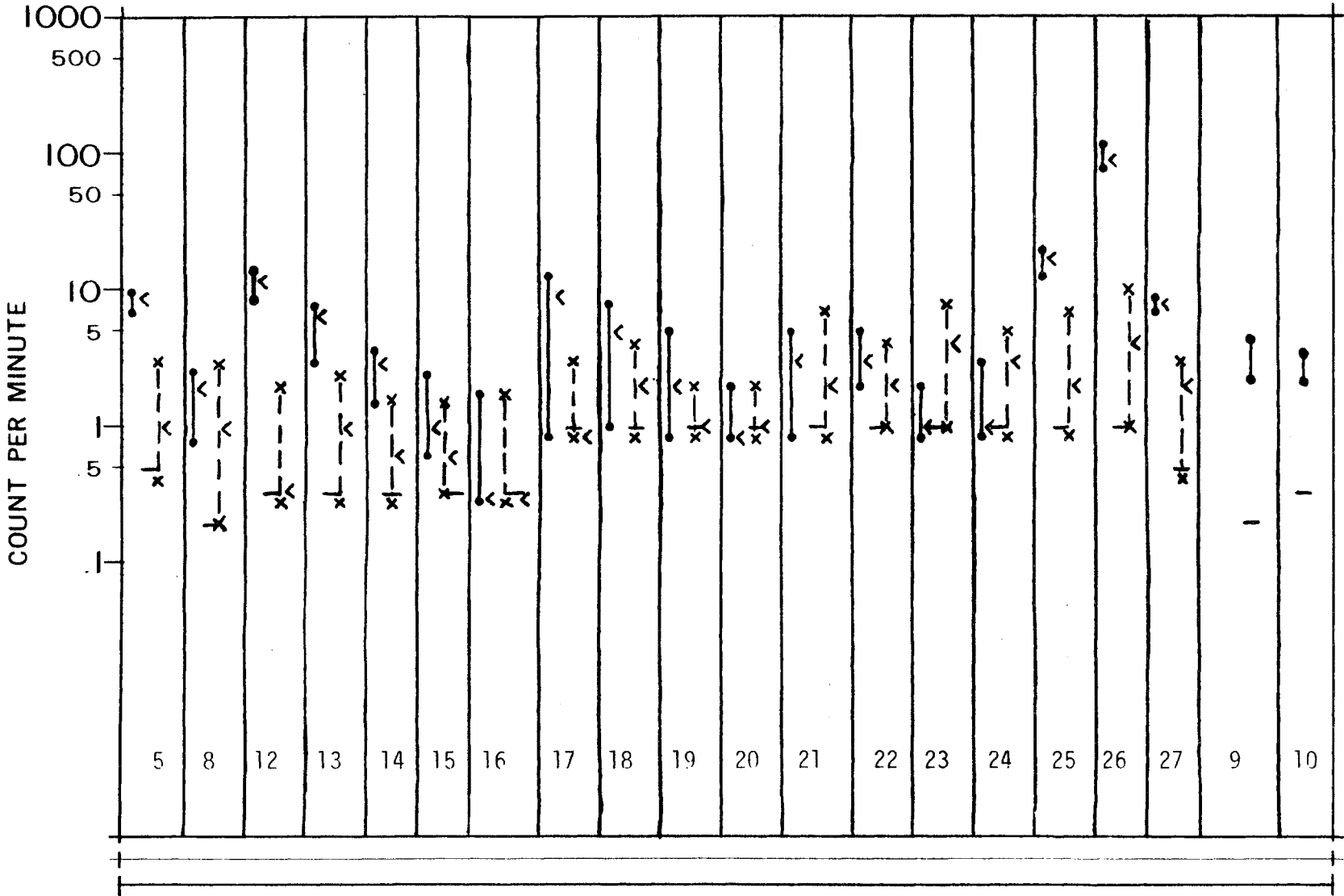


Chart 2. Median and range scores for the tasks outlined in Table 2- grade 8.

T. Jones

students

grade 8

numbered  
tasks

Rosedale Junior Secondary School

Rosedale, British Columbia

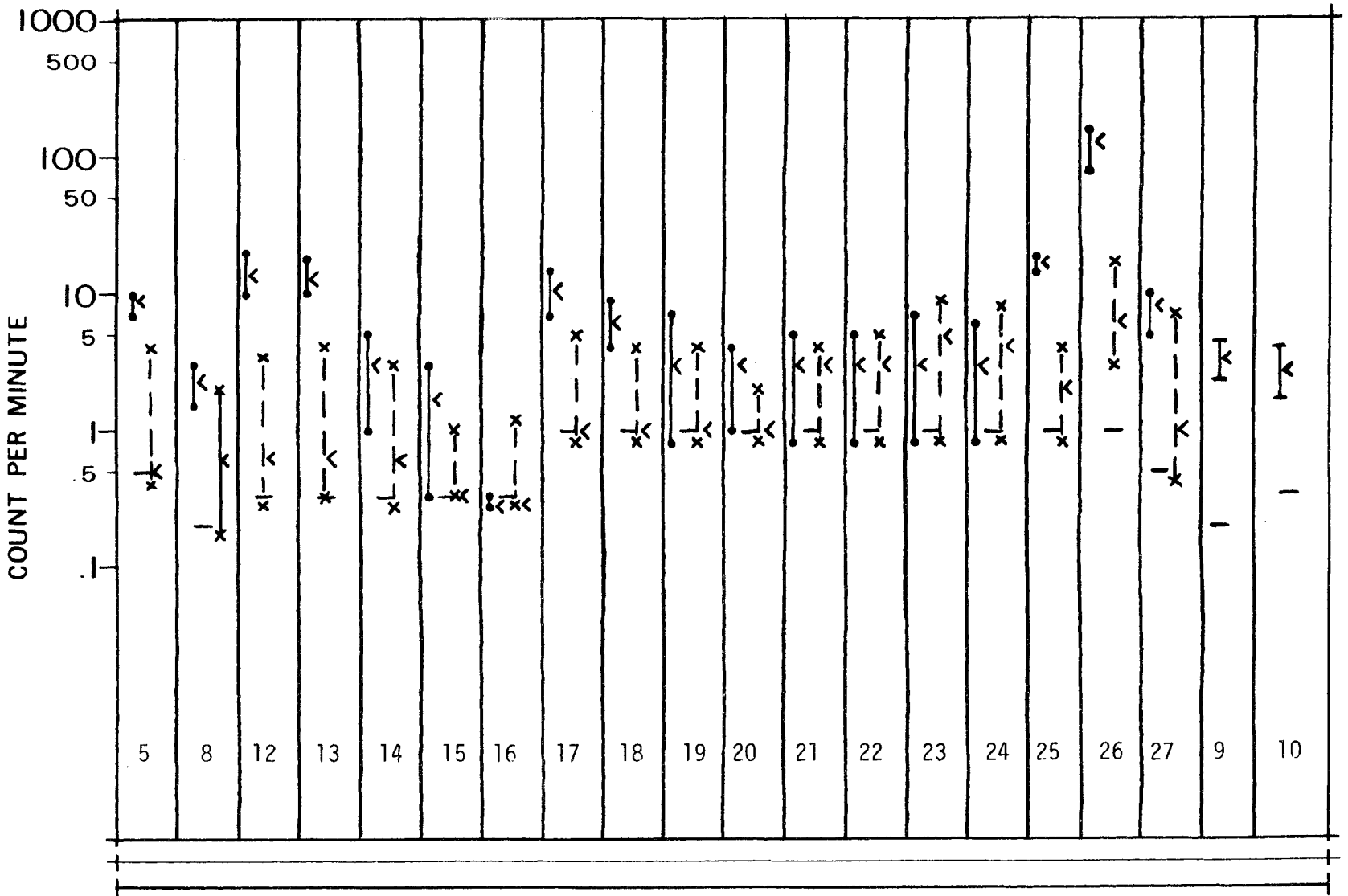


Chart 3. Median and range scores for tasks outlined in Table 2-Grade 9.

T. Jones

Rosedale Junior Secondary School Rosedale, British Columbia

numbered  
tasks

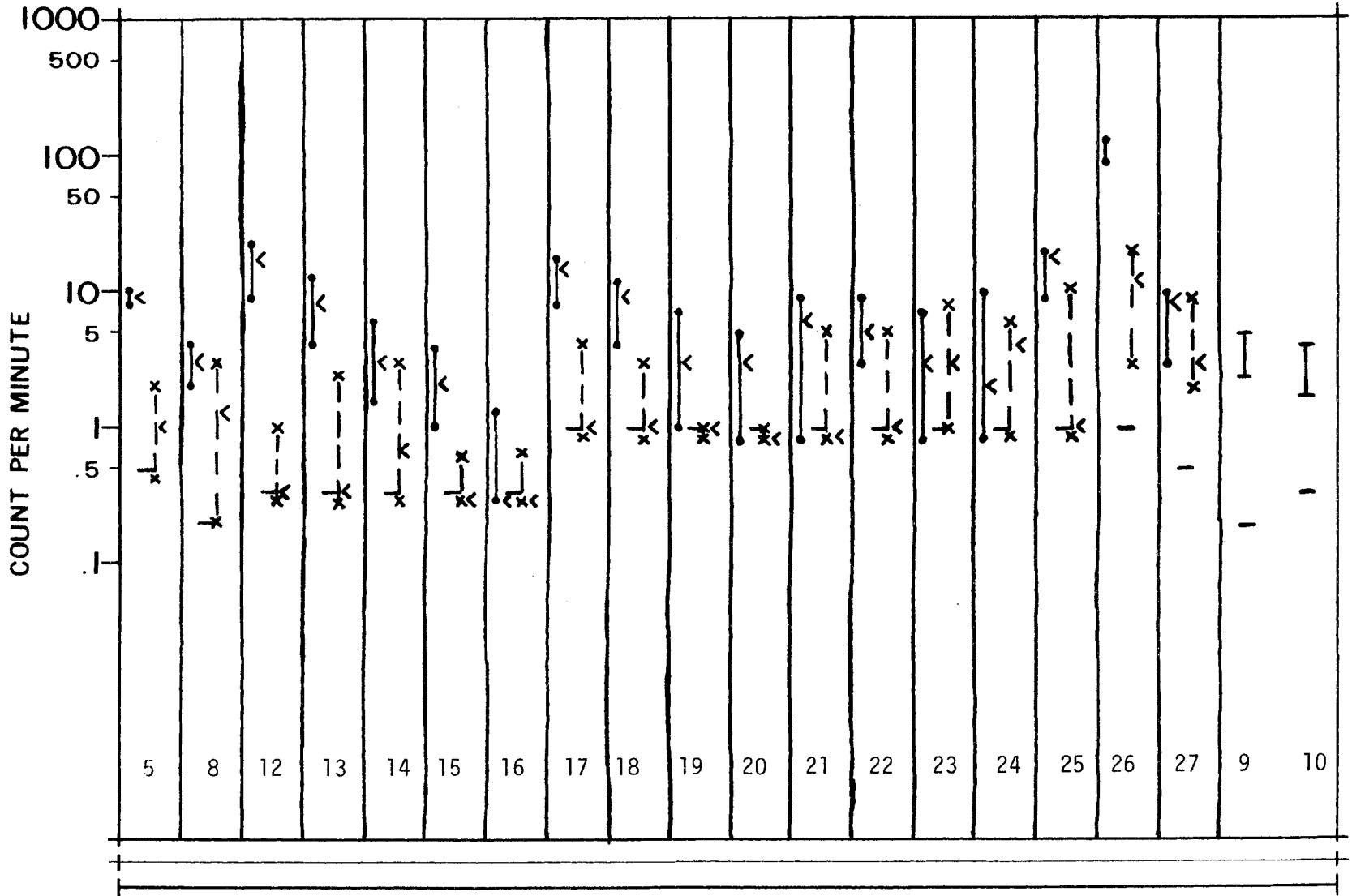


Chart 4. Median and range scores for tasks outlined in Table 2- Grade 10.