Technical Report # 24

Analysis of Reading Fluency and Comprehension Measures for Sixth Grade Students

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Introduction

The No Child Left Behind Act of 2001 has increased the importance of assessment in K-12 education. Designed to ensure that all students meet high academic standards, the law currently requires states receiving Title I funds to test all children annually in reading and math in grades 3 through 8 and report student performance disaggregated by poverty, race and ethnicity, disability, and limited English proficiency. By the 2005-06 school year, tests must be expanded to include at least one year between grades 10-12, and by 2007-08, states also must include science assessments at least once in grades 3-5, grades 6-9, and grades 10-12. The law requires states to set annual measurable objectives to track student progress towards proficiency, with the ultimate goal that "all groups of students—including low–income students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency—reach proficiency within 12 years" (U.S. Department of Education, 2002, p. 17).

With this goal in mind, school districts are developing assessment systems that enable them to monitor student progress in a timely fashion rather than waiting for year-end statewide assessments. These district assessments can serve multiple purposes: monitoring student progress, evaluating the effectiveness of particular programs and schools, and providing school personnel with valuable information about how well they and their students are doing. Developing easy-to-administer and score assessments at the district level can offer schools a distinct advantage over complete reliance on statewide assessments.

In the area of reading, three measures can provide essential information about students' developing proficiency: oral reading fluency (ORF), vocabulary, and reading comprehension comprised of both selected responses (SR) and constructed responses (CR). Taken together, these three measures should give a good prediction of student performance on the large-scale

reading assessment administered by the state. To be most useful at the district level, however, it is helpful to have a variety of comparable forms available for each of these measures so that students can be tested more than once each year without skewing the results due to a practice effect with the same items.

Methods

Setting and Subjects

This report summarizes the spring 2003, sixth-grade reading achievement data from five different schools in an urban school district in a mid-sized city in the Pacific Northwest. The original data set contained 334 students, but 28 students were removed from the data set prior to analysis because they had no scores for any of the dependent variables. Additional students were missing data in some but not all of the dependent variable measures, so the total sample size used for analyses varies by measure.

Design and Operational Procedures

Dependent variables analyzed in this report include scores from the following measures: a test of ORF (n = 263), a District Vocabulary Test (n = 304), a District Reading Comprehension Test (n = 303), and the previous year's statewide large-scale assessment in reading (n = 254). Scores for the District Vocabulary and Reading Comprehension tests are reported as percent correct rather than as raw scores because they contained different numbers of items on the different forms. ORF scores are reported as words read correctly per minute. Finally, the Total Reading Scale Score is used from the statewide, large-scale exam. All sixth-grade students present in school on the days the tests were administered completed all four assessments. Independent blocking factors analyzed in this report include gender and ethnicity, as well as

Special Education (SPED) and English Language Learner (ELL) which are both compared to non-SPED and non-ELL students in general education.

Measurement/Instrument Development

ORF

The test of Oral Reading Fluency was administered individually to each student by trained assessors. Students read aloud for exactly one minute one of four passages deemed grade-level appropriate on the Flesch-Kincaid reading scale. At the end of one minute, assessors marked the last word read then counted the total words read as well as any words read incorrectly to arrive at a final ORF score.

Vocabulary

Sixth-grade students were administered one of two multiple choice vocabulary tests. Both tests contained 70 questions, but only 69 questions from Form A were scored due to technical difficulty in the automatic scanning/scoring process. All 70 questions from Form B were scored. Each item on both forms consisted of one correct answer and two distracters. Students bubbled in their answers on the form itself, and all tests were machine scored.

Reading Comprehension

In addition, sixth-grade students were administered one of four reading comprehension tests. Each form of the reading comprehension test consisted of a reading passage followed by SR as well as CR questions. SR questions were machine scored while CR questions were all scored by the same administrator using scoring guides provided by the district. The scorer was trained by two district administrators who also checked every fifth paper to ensure that the scores were consistent with district expectations. Responses were discussed with both trainers when they were unable to decide on an appropriate score; a final score was then assigned.

Oregon State Assessment in Reading

For the past decade, students in this state have been administered the statewide exams in grades 3, 5, and 8. For this report, students' fifth grade scores on the spring 2002 assessment in reading were used.

Data Preparation and Analysis

The ORF data were analyzed using a *t*-test to check for comparability of passages and Analysis of Variance (ANOVA) was used to test for differential performance by different groups of students. For both the District Vocabulary and Reading Comprehension measures, an ANOVA was used to test for form comparability and differential performance by different groups of students. The percentage of students selecting each response was calculated, along with the mean score on the measure for the students selecting each response; finally, a correlation was computed between the response selection for each item and the scores on the measure. The Total Reading Scale Score on the statewide assessment was used for all correlations and multiple regression with student performance on the four district measures. Because the SR section of Form A of the District Reading Test was not comparable with the other three forms, data from Form A was excluded in the correlation and multiple regression analyses. Alpha was set at .05 for all analyses.

Results

ORF

An ANOVA of the four ORF forms reveals a significant difference between the forms $F(3, 259) = 7.26$, $p < .05$. Levene's test of homogeneity of variances was not significant, so post-hoc analysis was conducted using Bonferroni's procedure. This analysis indicated that students

performed significantly better on ORF Form C than they did on ORF forms D and A. There was no significant difference in student performance on ORF Form B compared to the other forms, or on ORF Form A compared to D. Analysis of student performance by group (see Table 1) revealed that the only group of students who performed significantly differently on the ORF test were those designated as receiving Special Education services [F (1, 223) = 18.19, $p < .05$]. No statistically significant differences were found between student performance on the ORF when blocked by gender, ethnicity, or ELL status (see Table 2).

Table 1

Descriptive Statistics for Grade 6 District ORF Test

Group		*n*	*M*	*SD*
Gender	Male	131	143.36	36.03
	Female	132	145.03	39.12
Ethnicity	White	179	146.55	36.30
	Hispanic	17	136.47	38.12
	African American	5	128.20	46.24
	Asian	8	155.38	16.28
	Native American	5	127.00	64.61
	Other	11	155.91	41.55
SPED		19	112.21	34.98
ELL		5	120.00	38.72
Total		263	144.20	37.55

Table 2

Analysis of Variance Summary Table for Grade 6 District ORF Test

Source	*df*	*F*	η^2	*p*
Gender	1	0.13	.00	.72
Error	261	(1414.61)		
Ethnicity	5	0.98	.02	.43
Error	219	(1379.53)		
SPED	1	18.19**	.08	.00
Error	223	(1280.59)		
ELL	1	2.47	.01	.12
Error	224	(1369.89)		

Note. Values enclosed in parentheses represent mean square errors.
*$p < .05$, **$p < .01$.

District Vocabulary Test

No statistically significant difference appeared between student performance on Forms A and B, [F (1, 278) = .000, $p > .05$]. Both forms, however, could yield a more detailed picture of differentiated student achievement if they were made more challenging as a ceiling effect was apparent (see Table 3).

Table 3

Comparison of Forms A and B of Grade 6 District Vocabulary Test

Form	*n*	*M*	*SD*
A	139	75.77	24.47
B	141	75.80	23.34

Because no significant difference was found between student performance on Form A and B of the District Vocabulary Test, descriptive statistics (see Table 4) and ANOVA (see Table 5) for the different groups includes data from both forms combined.

Table 4

Descriptive Statistics for Grade 6 District Vocabulary Test

Group		*n*	*M*	*SD*
Gender	Male	141	72.04	29.49
	Female	163	68.22	31.40
Ethnicity	White	203	73.04	28.13
	Hispanic	22	71.63	26.99
	African American	8	61.57	34.82
	Asian	11	71.90	26.81
	Native American	5	74.68	20.31
	Other	11	77.51	29.18
SPED		24	65.51	26.33
ELL		6	63.40	31.67
Total		304	70.00	30.54

No difference was apparent in student performance on the District Vocabulary Test for gender, ethnicity, or SPED or ELL designations.

Table 5

Analysis of Variance Summary Table for Grade 6 District Vocabulary Test

Source	*df*	*F*	η^2	*p*
Gender	1	1.19	.00	.28
Error	302	(0.09)		
Ethnicity	5	0.33	.01	.89
Error	255	(0.08)		
SPED	1	1.78	.01	.18
Error	258	(0.08)		
ELL	1	0.69	.00	.41
Error	258	(0.08)		

Note. Items in parentheses represent mean square errors.
*$p < .05$, **$p < .01$.

District Reading Comprehension Test

Table 6 provides descriptive statistics for the District Reading Comprehension Test. A statistically significant difference was found between student performance on the SR portion of the four forms [F (3, 300) = 11.44, $p < .05$]. Students performed at a significantly higher level on Form A. No significant difference, however, was found between student performance on the CR portion of the four forms [F (3, 299) = 2.13, $p > .05$].

Table 6

Descriptive Statistics for Grade 6 District Reading Comprehension Test

Form	*n*	SR *M*	SR *SD*	CR *M*	CR *SD*
A *Clever Woman*	82	81.81	17.77	51.71	30.86
B *Beowulf*	73	71.00	13.60	60.45	28.11
C *Powder Puff*	90	67.87	18.60	49.31	31.82
D *Shrek*	58	68.76	17.84	57.11	31.42

For this reason, Form A was separated from the other three forms for analyses of student performance by group in the SR section. All four forms were combined for analyses of the CR section. Descriptive statistics have been displayed in Table 7 for the SR section of Form A of the District Reading Test.

Table 7

Descriptive Statistics for Grade 6 District Reading Test: SR Form A

Group		*n*	*M*	*SD*
Gender	Male	36	82.13	16.71
	Female	47	81.39	19.30
Ethnicity	White	52	83.17	17.04
	Hispanic	4	75.00	30.28
	African American	6	77.50	23.61
	Asian	5	90.00	5.00
	Native American	1	85.00	0.00
	Other	2	87.50	17.68
SPED		7	69.29	29.64
ELL		2	92.50	3.54
Total		83	82.75	17.54

On Form A, no significant differences were found in performance on the SR section between different groups of students whether gender, ethnicity, or ELL designation was used as the basis for comparison (see Table 8). SPED designated students, however, performed significantly more poorly than their general education peers.

Table 8

Analysis of Variance Summary Table for Grade 6 District Reading Test: SR Form A

Source	*df*	*F*	η^2	*p*
Gender	1	0.04	.00	.85
Error	81	(0.03)		
Ethnicity	5	0.45	.03	.81
Error	65	(0.03)		
SPED	1	4.86*	.07	.03
Error	68	(0.03)		
ELL	1	0.61	.01	.44
Error	68	(0.03)		

Note. Items in parentheses represent mean square errors.
*$p < .05$, **$p < .01$.

Table 9 provides descriptive statistics for the SR section of the District Reading Test, Forms B, C, and D. On these forms, no significant difference in performance was found on the SR section between females and males. All other groups showed significant differences in student performance (see Table 10). Levene's test of homogeneity of variances was insignificant, so equal variances can be assumed and Bonferroni can be used for post hoc analysis of results.

Table 9

Descriptive Statistics for Grade 6 District Reading Test: SR Forms B, C, and D

Group		*n*	*M*	*SD*
Gender	Male	105	70.25	17.08
	Female	116	68.14	16.71
Ethnicity	White	151	71.65	16.06
	Hispanic	18	62.19	17.21
	African American	2	50.00	29.12
	Asian	6	77.51	12.47
	Native American	4	63.46	20.02
	Other	9	63.03	22.29
SPED		17	58.95	21.86
ELL		4	39.06	18.21
Total		219	70.01	16.70

Although the omnibus *F* test showed a significant difference by ethnicity in performance on the SR section of the District Reading Test, no significant difference was found among the different ethnic groups when using Bonferroni's procedure for post hoc analyses. Students designated as SPED and ELL performed significantly more poorly than their general education peers.

Table 10

Analysis of Variance Summary Table for Grade 6 District Reading Test: SR Forms B, C, and D

Source	*df*	*F*	η^2	*p*
Gender	1	0.86	.00	.35
Error	219	(0.03)		
Ethnicity	5	2.37*	.06	.04
Error	184	(0.03)		
SPED	1	8.53**	.04	.00
Error	188	(0.03)		
ELL	1	14.89**	.07	.00
Error	188	(0.03)		

Note. Items in parentheses represent mean square errors.
*$p < .05$, **$p < .01$.

Because no significant differences occurred between student performance on the CR sections of the four forms of the District Reading Test, scores from all four forms are combined for analyses of descriptive statistics (see Table 11) and ANOVA (see Table 12).

Table 11

Descriptive Statistics for Grade 6 District Reading Test: CR

Group		*n*	*M*	*SD*
Gender	Male	140	54.50	30.47
	Female	163	53.82	31.17
Ethnicity	White	202	59.44	28.43
	Hispanic	22	40.11	29.90
	African American	8	40.00	40.36
	Asian	11	47.50	30.10
	Native American	5	57.50	34.91
	Other	11	60.91	34.01
SPED		24	40.21	29.63
ELL		6	30.42	30.18
Total		303	54.13	30.78

Although the omnibus *F* test showed a significant difference in performance on the CR section of the District Reading Test by ethnicity, post hoc analyses using Bonferroni's procedure did not find any significant difference between the performances of the different ethnic groups. Students designated as SPED and ELL performed significantly more poorly than their non-designated peers.

Table 12

Analysis of Variance Summary Table for Grade 6 District Reading Test: CR

Source	*df*	*F*	η^2	*p*
Gender	1	0.04	.00	.85
Error	301	(0.10)		
Ethnicity	5	2.54*	.05	.03
Error	253	(0.09)		
SPED	1	8.35**	.03	.00
Error	259	(0.09)		
ELL	1	4.86*	.02	.03
Error	259	(0.09)		

Note. Items in parentheses represent mean square errors.
*$p < .05$, **$p < .01$

Correlation of the Four Measures

Because the SR section of Form A of the District Reading Test differed significantly from the other three forms, it was excluded from the remaining analyses. There was a significant positive correlation between all measures, with the highest correlation (r =.64) between the SR section of the District Reading Test and the statewide test in reading (see Table 13).

Table 13

Correlations Between the Grade 6 Measures

		District ORF	District Voc.	District SR Rdg	District CR Rdg	State Rdg
District ORF	Pearson Correlation	1	.29**	.47**	.40**	.54**
	Sig. (2-tailed)	.	.000	.000	.000	.000
	n	202	202	202	202	169
District Voc.	Pearson Correlation		1	.27**	.38**	.21**
	Sig. (2-tailed)		.	.000	.000	.005
	n		221	221	221	185
District SR Reading	Pearson Correlation			1	.47**	.64**
	Sig. (2-tailed)			.	.000	.000
	n			221	221	185
District CR Reading	Pearson Correlation				1	.33**
	Sig. (2-tailed)					.000
	n					185
State Reading	Pearson Correlation					1
	Sig. (2-tailed)					.
	n					185

**. Correlation is significant at the .01 level (2-tailed).

Regression Analysis of District Reading Assessments

When combined, district ORF, Vocabulary, and Reading Tests provided a statistically significant prediction of student performance on the previous spring's statewide assessment in reading F (4, 164) = 38.57, $p < .05$. The district measures taken together accounted for 47% of the variability in state reading test performance. Table 14 presents the results of regression analyses.

Table 14

Regression Summary for Grade 6 Statewide Reading Assessment

Independent Variables	Unstandardized Coefficients		Standardized Coefficients		95% Confidence Interval for B	
	B	Std. Error	Beta	t	Lower Bound	Upper Bound
ORF	1.E-01	0.02	.30	4.61	0.06	0.14
District Vocabulary	1.13	2.45	.03	0.46	-3.71	5.97
District Reading Test (SR)	32.45	4.72	.47	6.87	23.13	41.78
District Reading Test (CR)	1.48	2.56	.04	0.58	-3.56	6.53
Constant	189.09	3.32		56.99	182.54	195.64

Discussion

ORF

As discussed in the Results section, ORF passage C appeared easier than the other three forms. The district should re-write the passage to increase the level of difficulty and make it more comparable to the other three passages.

Otherwise, the ORF, as it was administered in 2002-03, was moderately correlated with sixth grade students' performance on the previous spring's statewide reading test (r= .54) and with same year performance on the District Reading Test (r = .40 - .47). It was weakly correlated with same year performance on the District Vocabulary Test (r = .29). Because the ORF has traditionally been easy to administer and has never required much time or training to score, it has

been a useful source of information for teachers monitoring student growth in reading. The results from this study have not contraindicated anything different.

District Vocabulary Test

Both forms of the District Vocabulary Test functioned as predicted, although the district may need to make the tests more challenging in order to obtain more information from them. They currently do not offer as much differentiation as would be possible with more difficult words. Also, their current low correlation with the previous spring's statewide reading test (r = .21) makes them less useful than the other measures as a source of information for teachers monitoring student reading growth.

District Reading Comprehension Test

The district administered four different forms of the Reading Comprehension Test, two of which were fiction (Forms A and B) and two of which were non-fiction (Forms C and D). The difference in type of literature (fiction versus non-fiction) did not have a significant effect on student performance. All four forms had different numbers of questions and varied slightly in length and degree of difficulty on the Flesch-Kincaid reading scale (see Table 15).

Table 15

Comparison of Grade 6 Reading Comprehension Forms

Form	Number of Words	Reading Level	Number of SR Questions	Mean SR Score	# of CR Questions	Mean CR Score	*n*
A *Clever Woman*	1210	7.0	20	82	5	51	85
B *Beowulf*	1380	6.3	24	71	4	60	74

C *Powder Puff*	1232	7.7	23	65	4	49	92
D *Shrek*	1207	7.2	17	69	4	57	59

The SR sections of Forms B, C, and D were comparable based on an ANOVA of student performance on the tests. There was no significant difference between student scores on these three forms. However, there was a statistically significant difference between student performance on the SR portion of the four forms, F (3, 300) = 11.44, $p < .05$. Students performed at a significantly higher level on Form A. There was no significant difference between student performance on the CR portion of the four forms [F (3, 299) = 2.13, $p > .05$]. The SR section of Form A is easier than the SR section of the other three forms. This conclusion is obvious even from reading the passage and questions asked, with student performance later corroborating finding. In addition, three of the CR questions for Form A are exact duplicates of the SR questions on the test (see Table 16), which is not true of the tests for the other passages.

Table 16

Form A Grade 6 Questions Duplicated on CR and SR Sections

# of CR	# of SR
22	14
23	2
24	19

Because form A is not equivalent to the other three forms, scores on it cannot reliably be compared to scores on the other three forms.

Forms B, C, and D of the District Reading Comprehension Test were comparable, which must be maintained even while shortening the forms to 15 multiple choice and two constructed response questions. Table 17 presents a list of items for removal from each of the forms, based on analysis of how each of the items was functioning.

Table 17

Items for Removal from Grade 6 Reading Test and How Removal Would Affect Scores

Form	SR Item #s for Removal	New Mean SR Score	SR Score Before Removal	CR Item #s for Removal	New Mean CR Score	CR Score Before Removal
A	3, 4, 11, 17, 18	78	82	22, 23, 24	62	51
B	1, 3, 6, 9, 10, 15, 16, 23, 24	67	71	25, 26	54	60
C	1, 4, 5, 12, 13, 16, 17, 20	67	65	24, 26	50	49
D	3, 11	67	69	19, 20	51	57

While these recommendations are based on student performance, Table 18 provides a rationale for each of them. Based on mean student performance, removing the suggested SR items brought Forms B, C, and D closer together—mean student score based on the abbreviated forms remained the same—but the abbreviated Form A was still significantly easier than the others. To make Form A more comparable to the other three Reading Comprehension Test forms, more difficult test items need to be written.

In reading Table 18, an item is considered *redundant* if students performed equally well on that item as they did on another item on the same form. The percentage given in parentheses refers to the percentage of sixth grade students who answered that particular item correctly. A

distracter is referred to as a *bad distracter* when no students selected that particular response; distracters selected by no students are noted in the *Action Needed to Save Item for Question Bank* column. See Appendix A for a complete table of Item Analysis for the SR section of the District Reading Test.

Table 18

Rationale for Items Suggested for Removal from Grade 6 District Reading Test

Form	Item	Rationale for Removal	Action Needed to Save Item for Question Bank
A	3	Too easy (95%)	Re-write question
A	4	Too easy (94%)	Re-write question
A	11	Too easy (94%)	Re-write question
A	17	Too easy (95%)	Re-write question
A	18	Too easy (94%)	Re-write question
A	22	Repeat of SR #14, and too easy	Make more challenging and remove SR #14
A	23	Repeat of SR #2	Remove SR #2
A	24	Repeat of SR #19	Remove SR #19
B	1	Redundant and one bad distracter	Re-write Distracter D
B	3	Too easy (95%) and two bad distracters	Re-write Distracters C and D
B	6	Too easy (97%) and two bad distracters	Re-write Distracters C and D
B	9	Redundant and one bad distracter	Re-write Distracter B
B	10	Redundant	OK to use as is
B	15	Redundant and one bad distracter	Re-write Distracter A
B	16	Redundant	OK to use as is
B	18	Too easy (95%)	Re-write to make more challenging
B	19	Too hard (32%)	Re-write to make less challenging
B	22	Too easy (95%)	Re-write to make more challenging
B	23	Unfair to dyslexics, and low	Select a different word rather than “lair” and/or

		correlation between high-scoring students and correct response.	re-write Distracter A
B	24	Redundant and one bad distracter	Re-write Distracter A
B	25	Too easy (74%) and redundant	Re-write to make more challenging
B	26	Too easy (85%)	Re-write to make more challenging
C	1	Redundant	OK to use as is
C	4	Redundant and one bad distracter	Re-write Distracter D
C	5	Redundant	OK to use as is
C	12	Too hard (9%)	Re-write to make less challenging
C	13	Redundant and one bad distracter	Re-write Distracter B
C	16	Redundant	OK to use as is
C	17	Redundant	OK to use as is
C	20	Redundant	OK to use as is
C	24	Redundant	OK to use as is
C	26	Too easy (85%)	Re-write to make more challenging
D	3	Redundant and one bad distracter	Re-write Distracter B
D	11	Two bad distracters	Re-write Distracters C and D
D	19	Too easy	Re-write to make more challenging
D	20	Too easy	Re-write to make more challenging

The district's current reading assessment kit can offer insights into strengths of particular programs, schools, and teachers and provide school personnel with information that can help them measure student progress towards reading proficiency. It will continue to be revised, and

the revisions will be analyzed using Item Response Theory (IRT) in subsequent years as the district works to improve the reliability and validity of the instruments for the various ways they are used. Additional technical reports will be written to follow up on these analyses and document the changes being made to the reading assessment kit.

Addendum

After receiving input from these analyses, district personnel met to review and revise the reading assessment kit. Table 19 displays the items they removed and how removal of those items affected student performance on the measure.

Table 19

Items Actually Removed from Grade 6 Reading Test and How Removal Affected Scores

Form	SR Item #s for Removal	New Mean SR Score	SR Score Before Removal	CR Item #s for Removal	New Mean CR Score	CR Score Before Removal
A			83			92
B			77			73
C			68			22
D			79			65

References

U.S. Department of Education. (2002). *No child left behind: a desktop reference.* U.S. Department of Education, Office of Elementary and Secondary Education. Washington, DC: Author.

Appendix A

Item	Form	% of students who got item correct	% of students selecting Option A	% of students selecting Option B	% of students selecting Option C	% of students selecting Option D	Mean score of students selecting Option A	Mean score of students selecting Option B	Mean score of students selecting Option C	Mean score of students selecting Option D	Correlation between student score and selection of correct answer
1	A	56%	14%	23%	56%	7%	15.33	15.00	17.21	15.17	0.29
2	A	92%	1%	5%	2%	92%	7.00	12.00	6.00	16.91	0.57
3	A	95%	95%	1%	0%	4%	16.79	6.00	0.00	6.67	0.62
4	A	94%	5%	0%	94%	1%	9.50	0.00	16.65	17.00	0.38
5	A	77%	79%	15%	1%	5%	17.26	14.54	13.00	7.00	0.54
6	A	86%	5%	86%	4%	6%	11.25	17.13	12.00	11.00	0.57
7	A	54%	17%	16%	14%	53%	15.07	14.69	14.00	17.73	0.42
8	A	84%	84%	6%	0%	10%	17.51	11.00	0.00	8.88	0.80
9	A	54%	0%	43%	4%	54%	0.00	16.36	14.00	16.40	0.03
10	A	64%	5%	65%	29%	1%	13.00	17.05	15.42	9.00	0.32
11	A	94%	94%	4%	2%	0%	16.61	11.67	11.00	0.00	0.35
12	A	78%	11%	77%	8%	4%	14.00	17.55	10.57	12.00	0.60
13	A	89%	5%	5%	0%	90%	11.50	11.25	0.00	16.91	0.48
14	A	90%	2%	5%	90%	2%	7.50	11.25	17.11	8.00	0.64
15	A	88%	2%	7%	87%	4%	10.00	14.33	17.15	8.67	0.50
16	A	87%	87%	7%	0%	6%	16.97	13.67	0.00	12.60	0.38
17	A	95%	96%	4%	0%	0%	16.90	8.00	0.00	0.00	0.51
18	A	94%	1%	95%	2%	1%	7.00	17.05	6.50	9.00	0.64
19	A	89%	1%	90%	5%	4%	9.00	17.38	9.25	9.00	0.75
20	A	93%	4%	1%	1%	94%	10.00	9.00	8.00	17.04	0.56
1	B	51%	44%	5%	51%	0%	15.81	17.25	18.14	0.00	0.34
2	B	49%	3%	47%	1%	49%	13.00	15.76	18.00	18.62	0.44
3	B	95%	96%	4%	0%	0%	17.40	10.00	0.00	0.00	0.39
4	B	73%	4%	0%	71%	25%	11.33	0.00	17.76	16.00	0.31
5	B	96%	96%	1%	1%	1%	17.37	16.00	5.00	11.00	0.41
6	B	97%	3%	97%	0%	0%	7.50	17.33	0.00	0.00	0.49
7	B	60%	29%	3%	8%	60%	17.00	10.00	15.67	17.60	0.21
8	B	53%	53%	27%	12%	7%	17.67	16.21	16.22	17.00	0.19
9	B	93%	4%	0%	3%	93%	13.67	0.00	10.50	17.46	0.39
10	B	60%	22%	62%	14%	3%	15.94	18.00	16.20	9.50	0.37
11	B	64%	63%	8%	5%	23%	18.24	11.50	13.00	16.87	0.46
12	B	79%	11%	79%	8%	1%	12.88	17.89	16.67	5.00	0.50
13	B	90%	3%	5%	0%	92%	11.00	11.00	0.00	17.67	0.52
14	B	36%	55%	7%	34%	4%	15.85	17.20	19.04	17.33	0.42
15	B	90%	0%	5%	92%	3%	0.00	12.00	17.48	14.00	0.38
16	B	64%	63%	8%	16%	12%	18.24	14.83	16.00	14.22	0.46
17	B	55%	55%	7%	0%	38%	17.45	13.40	0.00	17.30	0.12
18	B	93%	3%	95%	1%	1%	13.00	17.21	20.00	12.00	0.17
19	B	32%	22%	30%	37%	11%	16.69	18.52	16.23	17.00	0.30

20	B	81%	11%	3%	4%	82%	13.75	11.00	15.67	17.81	0.46
21	B	52%	8%	16%	51%	25%	15.67	16.25	18.25	15.67	0.37
22	B	95%	1%	95%	3%	1%	16.00	17.35	10.00	12.00	0.38
23	B	88%	4%	1%	7%	88%	15.67	10.00	16.50	17.36	0.19
24	B	64%	0%	29%	63%	8%	0.00	16.38	17.66	15.17	0.28
1	C	90%	8%	1%	90%	1%	12.71	7.50	15.80	16.00	0.18
2	C	41%	36%	13%	10%	41%	15.28	13.33	13.89	17.28	0.30
3	C	41%	41%	11%	4%	44%	16.97	12.82	13.00	14.93	0.27
4	C	87%	2%	11%	87%	0%	7.00	12.55	16.04	0.00	0.29
5	C	90%	90%	1%	1%	8%	16.10	9.50	15.00	11.00	0.31
6	C	97%	1%	97%	0%	2%	18.00	15.74	0.00	6.50	0.24
7	C	48%	28%	18%	6%	48%	13.76	12.94	11.80	18.09	0.56
8	C	84%	84%	11%	2%	2%	16.32	12.73	11.50	9.00	0.35
9	C	91%	4%	2%	2%	91%	13.50	12.00	8.50	16.24	0.29
10	C	61%	3%	61%	17%	18%	11.67	17.22	13.40	14.75	0.46
11	C	83%	83%	5%	7%	6%	16.88	11.60	13.17	11.20	0.49
12	C	9%	41%	9%	9%	41%	17.33	14.00	11.63	15.94	-0.15
13	C	92%	4%	0%	3%	92%	12.75	13.00	7.67	16.33	0.40
14	C	90%	6%	2%	90%	2%	14.40	11.67	16.38	13.50	0.26
15	C	74%	8%	5%	74%	13%	13.29	11.00	17.17	13.64	0.51
16	C	79%	4%	79%	8%	9%	10.33	16.85	14.29	14.50	0.36
17	C	75%	75%	4%	13%	8%	17.40	13.50	13.82	12.17	0.54
18	C	80%	5%	80%	7%	7%	12.25	17.22	12.00	14.00	0.50
19	C	54%	2%	54%	19%	25%	14.00	17.33	12.87	17.25	0.28
20	C	49%	40%	1%	10%	49%	15.00	16.50	13.75	18.10	0.48
21	C	53%	11%	30%	53%	6%	16.22	14.28	18.00	14.20	0.49
22	C	78%	4%	78%	6%	12%	13.33	17.39	12.20	13.50	0.50
23	C	88%	6%	1%	5%	88%	14.20	17.00	11.75	16.93	0.37
1	D	66%	9%	9%	66%	17%	8.20	10.80	12.61	10.56	0.40
2	D	86%	5%	7%	2%	86%	7.00	6.00	11.00	12.38	0.54
3	D	72%	72%	0%	14%	14%	12.19	0.00	10.88	9.88	0.27
4	D	25%	29%	45%	25%	2%	12.06	11.46	12.00	10.00	0.05
5	D	60%	60%	31%	3%	5%	12.46	11.17	8.00	8.33	0.31
6	D	60%	0%	60%	34%	5%	0.00	12.24	11.20	9.00	0.21
7	D	67%	14%	11%	9%	67%	8.13	9.17	10.00	13.11	0.63
8	D	48%	48%	19%	12%	21%	12.71	10.45	12.57	9.60	0.33
9	D	65%	4%	5%	26%	65%	8.00	9.00	10.36	12.89	0.46
10	D	53%	23%	53%	16%	9%	11.08	13.10	10.67	8.40	0.45
11	D	95%	95%	5%	0%	0%	12.00	7.00	0.00	0.00	0.28
12	D	81%	5%	81%	5%	9%	10.00	12.52	8.00	8.00	0.50
13	D	84%	2%	9%	5%	84%	6.00	7.80	9.33	12.58	0.55
14	D	75%	5%	11%	75%	9%	9.00	7.40	12.69	10.60	0.52
15	D	91%	5%	2%	91%	2%	8.67	12.00	12.12	6.00	0.32
16	D	84%	84%	7%	5%	4%	12.60	9.25	6.33	6.00	0.64
17	D	73%	73%	9%	16%	2%	12.38	11.80	9.56	11.00	0.30