

NEW!

TPRI Fluency Equating Tables

Why Measure Fluency Rates?

The ability to read fluently is important for readers primarily because fluency is closely tied to comprehension. However, we measure student fluency rates on TPRI for other reasons as well. Fluency growth suggests that students are learning to recognize more words automatically, decode words more quickly and are building their vocabularies. We also determine fluency rates because they are relatively quick and easy to measure, and they provide insight into whether students are making reading progress.

Assessing Progress is Tricky

On the TPRI, students typically read two stories each time the TPRI is administered (at BOY, MOY and EOY). The difficulty of the stories ranges from less challenging to more challenging. When students receive multiple fluency scores, and read stories of varying difficulty, it is sometimes hard to tell if students are improving from one time point to the next. The examples on the next page illustrate this difficulty and show how equated fluency scores can help.

TPRI Fluency Equating Tables – Tools for Teachers

TPRI provides tools to help teachers measure and understand fluency scores more effectively. These tools come in the form of Fluency Equating Tables which equate fluency performance on any story with the hardest End-of-Year story (Story 6).

Use the information in the tables on the following pages to determine the equated fluency score for each story that your students read (sample below).

INSTRUCTIONS:

1. Using the first column, locate the student's actual Words Correct per Minute (WCPM) fluency score.
2. Look across the columns to the right to find the Equated WCPM score for the story the student read.


NOTE: If the student read Story 6, the actual fluency score is the same as the equated score.

ACTUAL	BOY		MOY		EOY	
	Story 1 <i>Rosa's New Friend</i>	Story 2 <i>Skateboard!</i>	Story 3 <i>Spring Break</i>	Story 4 <i>Meat-Eating Plants</i>	Story 5 <i>Firefighter</i>	Story 6 <i>Sharks</i>
Student's Actual WCPM Score (Raw Score)	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM
50	44.5	43.2	46.5	45.3	40.8	50.0
51	44.6	44.0	47.4	46.8	42.1	51.0
52	44.8	44.5	48.0	47.2	43.5	52.0
53	45.3	44.9	48.3	47.6	44.5	53.0
54	46.6	46.7	48.6	48.6	44.8	54.0
55	46.8	46.9	48.9	49.8	46.6	55.0
56	47.0	47.1	49.2	50.4	47.0	56.0
57	47.3	47.3	49.4	51.7	48.2	57.0


TPRI Fluency Equating Helps Teachers Assess Progress

With equated fluency scores teachers can reflect on student fluency without concern for how many TPRI stories were read, which story was read or how difficult the stories were. Consider the examples below:

Is Michael making good progress towards the 2nd grade End-of-Year goal of 90 WCPM?

Example Using ACTUAL TPRI Fluency Scores	BOY	MOY
	<ul style="list-style-type: none"> • Story 1 – 74 WCPM • Story 2 – 70 WCPM • Average Fluency Score: 72 WCPM 	<ul style="list-style-type: none"> • Story 3 – 81 WCPM • Story 4 – 74 WCPM • Average Fluency Score: 77.5 WCPM
		<p><i>It's hard to tell if Michael is improving enough. He is making progress though, and reading 77 WCPM is pretty good for second grade at MOY.</i></p>

	ACTUAL	BOY		MOY	
	Student's Actual WCPM Score (Raw Score)	Story 1 <i>Rosa's New Friend</i> Equated WCPM	Story 2 <i>Skateboard!</i> Equated WCPM	Story 3 <i>Spring Break</i> Equated WCPM	Story 4 <i>Meat-Eating Plants</i> Equated WCPM
Story 2	70	56.6	58.3	57.5	63.4
	71	58.3	58.8	58.6	65.1
	72	59.2	59.1	59.1	66.4
Stories 1 & 4	73	59.5	59.4	59.5	66.9
	74	60.0	60.3	59.9	68.4
	75	60.7	61.5	60.5	69.3
	76	61.3	62.1	61.2	69.5
	77	61.9	62.6	61.8	69.8
	78	63.3	63.0	63.5	69.9
	79	64.1	63.5	64.7	69.9
Story 3	80	65.2	64.1	65.8	70.0
	81	66.2	65.8	66.9	71.6
	82	66.9	66.4	68.0	73.0

Example Using EQUATED TPRI Fluency Scores	BOY	MOY
	<ul style="list-style-type: none"> • Story 1 – 60.0 WCPM • Story 2 – 58.3 WCPM • Average Fluency Score: 59.2 WCPM 	<ul style="list-style-type: none"> • Story 3 – 66.9 WCPM • Story 4 – 68.4 WCPM • Average Fluency Score: 67.6 WCPM
		<p><i>At BOY Michael was on target reading almost 60 WCPM at the start of second grade. Now he's falling behind! He's definitely not on track to reach 90 WCPM at EOY. I need to change my instruction to ensure he gets the help he needs.</i></p>

Making Instructional Decisions

Equated scores help to show difficulties that might be missed by looking just at actual scores. When grouping students and making instructional decisions using an equated TPRI fluency score, identify the equated fluency score for each story, then use these two equated scores to calculate the **AVERAGE EQUATED FLUENCY SCORE**.

Grade 1 - Fluency Equating Tables

INSTRUCTIONS:

1. Using the first column, locate the student's actual Words Correct per Minute (WCPM) fluency score.
2. Look across the columns to the right to find the Equated WCPM score for the story the student read.

NOTE: If the student read Story 6, the actual fluency score is the same as the equated score.

ACTUAL	BOY		MOY		EOY	
Student's Actual WCPM Score (Raw Score)	Story 1 <i>Tut</i> Equated WCPM	Story 2 <i>Baseball Game</i> Equated WCPM	Story 3 <i>Rex</i> Equated WCPM	Story 4 <i>Bats</i> Equated WCPM	Story 5 <i>Bananas</i> Equated WCPM	Story 6 <i>The School Fair</i> Equated WCPM
15	17.3	NA	14.8	17.3	16.5	15.0
16	17.6	NA	15.3	17.8	16.8	16.0
17	18.0	14.9	15.8	18.3	17.1	17.0
18	18.5	16.8	16.3	18.9	17.4	18.0
19	19.0	17.3	16.7	19.5	17.8	19.0
20	19.5	17.4	17.2	19.7	18.3	20.0
21	20.1	18.5	17.4	20.0	19.2	21.0
22	20.9	19.8	17.7	20.6	19.7	22.0
23	21.7	21.4	17.9	23.9	19.9	23.0
24	23.4	22.5	18.1	24.8	20.6	24.0
25	24.2	23.7	19.2	25.7	23.6	25.0
26	24.5	24.5	20.0	26.6	25.5	26.0
27	25.0	25.3	20.9	27.3	26.0	27.0
28	25.4	27.3	22.8	27.9	27.4	28.0
29	26.8	27.5	24.1	28.3	27.6	29.0
30	27.6	27.6	24.4	28.8	27.7	30.0
31	27.7	27.7	24.8	30.0	27.8	31.0
32	28.1	28.0	26.4	30.3	28.3	32.0
33	28.7	28.3	27.4	31.2	29.1	33.0
34	29.2	28.6	27.7	34.3	29.9	34.0
35	29.5	29.1	28.1	35.5	30.0	35.0
36	29.9	29.8	28.3	36.3	30.1	36.0
37	30.3	30.0	28.6	36.6	30.3	37.0
38	31.1	30.0	29.4	37.1	30.9	38.0
39	33.4	30.1	30.0	38.7	35.3	39.0
40	35.0	30.2	30.1	41.2	35.8	40.0
41	35.6	32.8	30.3	43.4	36.1	41.0
42	36.1	34.4	30.9	43.6	37.0	42.0
43	37.1	35.1	33.4	44.3	38.7	43.0
44	38.3	35.7	34.7	44.9	41.2	44.0
45	39.7	36.4	35.5	45.7	42.6	45.0
46	40.9	36.7	36.0	47.1	43.4	46.0
47	42.4	37.2	36.4	48.6	43.5	47.0
48	43.4	39.0	36.9	49.5	43.5	48.0
49	43.5	40.0	37.3	51.2	43.6	49.0

Grade 1 - Fluency Equating Tables

ACTUAL	BOY		MOY		EOY	
	Story 1 <i>Tut</i>	Story 2 <i>Baseball Game</i>	Story 3 <i>Rex</i>	Story 4 <i>Bats</i>	Story 5 <i>Bananas</i>	Story 6 <i>The School Fair</i>
Student's Actual WCPM Score (Raw Score)	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM
50	43.8	41.2	38.3	53.5	43.8	50.0
51	44.1	42.8	39.4	54.1	44.0	51.0
52	44.4	44.5	41.3	55.6	44.2	52.0
53	44.6	46.3	43.5	56.1	44.7	53.0
54	44.8	47.2	44.4	56.5	46.8	54.0
55	47.4	49.1	44.7	56.7	48.8	55.0
56	48.8	52.1	46.9	56.9	52.8	56.0
57	49.8	53.1	47.9	57.1	53.4	57.0
58	50.9	54.5	48.5	57.8	53.8	58.0
59	51.8	55.6	49.2	58.8	55.8	59.0
60	52.5	55.7	51.0	59.3	56.3	60.0
61	53.5	55.8	52.4	59.5	57.2	61.0
62	54.3	55.9	53.4	60.9	57.7	62.0
63	55.6	56.2	53.8	62.4	58.4	63.0
64	56.0	56.8	55.8	64.5	59.3	64.0
65	57.0	57.3	56.3	65.0	59.5	65.0
66	57.2	58.0	57.1	65.5	61.4	66.0
67	57.9	59.4	57.5	66.0	62.4	67.0
68	58.8	60.7	57.9	66.9	63.8	68.0
69	59.5	61.4	58.6	67.6	65.3	69.0
70	61.3	64.0	59.4	68.7	66.1	70.0
71	61.4	64.8	61.3	69.6	67.3	71.0
72	61.5	65.3	62.8	70.5	68.0	72.0
73	63.4	65.7	64.6	71.9	68.6	73.0
74	64.9	66.1	65.1	73.8	73.9	74.0
75	65.6	66.7	65.7	74.6	75.7	75.0
76	67.0	67.1	66.9	75.3	76.2	76.0
77	69.6	67.2	67.3	76.7	76.4	77.0
78	72.1	67.3	67.9	78.5	76.7	78.0
79	74.0	67.5	70.0	79.2	77.4	79.0
80	75.3	68.1	72.4	80.3	78.1	80.0
81	75.9	69.3	74.7	81.4	78.4	81.0
82	76.5	71.7	75.7	82.1	78.7	82.0
83	77.7	74.4	76.3	82.7	79.0	83.0
84	78.8	75.5	76.7	83.4	79.3	84.0
85	79.9	76.5	77.7	83.6	79.8	85.0
86	82.3	78.8	78.9	84.2	80.6	86.0
87	83.6	79.2	79.1	85.0	82.0	87.0
88	84.0	79.8	79.2	85.7	83.5	88.0
89	85.2	80.9	79.5	87.0	83.7	89.0
90	86.1	82.1	79.8	87.7	84.8	90.0
91	86.5	83.3	81.5	88.2	85.8	91.0
92	86.9	83.6	83.1	88.7	87.0	92.0
93	87.4	85.7	83.5	89.2	87.9	93.0
94	88.8	87.3	83.6	89.7	88.6	94.0

Grade 1 - Fluency Equating Tables

ACTUAL	BOY		MOY		EOY	
	Story 1 <i>Tut</i>	Story 2 <i>Baseball Game</i>	Story 3 <i>Rex</i>	Story 4 <i>Bats</i>	Story 5 <i>Bananas</i>	Story 6 <i>The School Fair</i>
Student's Actual WCPM Score (Raw Score)	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM	Equated WCPM
95	93.7	91.5	83.7	91.5	89.3	95.0
96	97.2	94.2	85.1	93.4	90.2	96.0
97	100.8	96.1	86.4	95.7	91.5	97.0
98	103.8	98.5	87.4	96.0	92.8	98.0
99	104.6	99.7	88.9	96.2	93.9	99.0
100	104.9	99.9	90.3	96.5	94.8	100.0
101	105.2	100.0	91.6	96.7	95.7	101.0
102	105.5	100.2	92.8	99.6	96.5	102.0
103	105.7	101.0	94.1	100.7	98.1	103.0
104	105.8	103.0	95.4	102.3	99.7	104.0
105	105.9	103.6	96.4	103.0	99.9	105.0
106	106.1	104.1	98.0	103.5	100.1	106.0
107	107.1	104.6	99.7	103.9	100.3	107.0
108	109.3	104.8	100.0	104.4	100.9	108.0
109	111.4	104.9	100.3	104.8	101.5	109.0
110	113.5	105.1	100.8	105.4	102.0	110.0
111	114.6	105.2	101.4	105.8	102.4	111.0
112	115.5	105.4	102.0	105.9	102.8	112.0
113	116.1	105.5	102.7	106.4	103.3	113.0
114	116.8	105.7	103.4	111.4	104.1	114.0
115	117.2	105.8	104.3	113.7	105.8	115.0
116	117.4	105.9	105.6	114.6	106.0	116.0
117	117.7	106.1	105.7	115.3	106.2	117.0
118	117.9	107.2	105.8	116.0	106.4	118.0
119	118.3	110.6	105.9	116.6	107.2	119.0
120	118.8	111.9	105.9	117.1	108.2	120.0
121	119.4	113.0	106.1	117.5	109.1	121.0
122	120.2	113.7	106.3	117.9	110.0	122.0
123	120.9	114.2	107.3	118.1	112.0	123.0
124	121.6	114.6	109.7	118.3	114.0	124.0
125	122.1	115.0	111.2	118.5	114.7	125.0
126	122.6	115.4	112.2	118.6	115.3	126.0
127	123.1	115.8	113.2	118.8	115.8	127.0
128	123.6	116.1	114.0	119.0	116.2	128.0
129	124.0	116.4	114.6	119.4	116.5	129.0
130	127.4	116.8	115.2	119.7	116.9	130.0
131	130.5	117.1	115.8	120.1	117.3	131.0
132	131.7	117.4	116.4	120.5	117.7	132.0
133	132.4	117.7	117.0	120.9	118.0	133.0
134	132.8	118.0	117.6	121.3	118.2	134.0
135	133.2	118.5	118.1	122.2	118.4	135.0
136	133.7	118.9	118.6	123.0	118.6	136.0
137	134.1	119.6	119.0	123.9	118.8	137.0
138	134.5	120.5	120.8	126.3	119.0	138.0
139	134.9	121.3	121.9	128.9	120.4	139.0

Grade 1 - Fluency Equating Tables

ACTUAL	BOY		MOY		EOY	
Student's Actual WCPM Score (Raw Score)	Story 1 <i>Tut</i> Equated WCPM	Story 2 <i>Baseball Game</i> Equated WCPM	Story 3 <i>Rex</i> Equated WCPM	Story 4 <i>Bats</i> Equated WCPM	Story 5 <i>Bananas</i> Equated WCPM	Story 6 <i>The School Fair</i> Equated WCPM
140	135.4	123.0	122.8	131.4	121.3	140.0
141	137.3	124.0	123.7	132.2	122.0	141.0
142	139.9	125.4	125.2	132.7	122.6	142.0
143	142.6	126.5	127.3	133.2	123.2	143.0
144	145.2	127.6	129.4	133.7	123.7	144.0
145	147.8	128.7	131.5	134.3	125.8	145.0
146	150.9	129.8	132.7	134.8	129.5	146.0
147	154.1	130.9	133.7	135.3	131.7	147.0
148	157.2	131.7	134.8	135.5	132.6	148.0
149	160.3	132.5	135.5	138.2	133.3	149.0
150	163.4	133.2	139.6	139.9	134.0	150.0
151	165.0	133.8	142.8	141.7	134.6	151.0
152	166.8	134.4	145.9	143.4	135.3	152.0
153	168.1	135.1	147.8	145.1	135.5	153.0
154	169.3	135.5	151.0	146.8	137.0	154.0
155	170.5	139.0	153.3	147.8	138.0	155.0
156	171.7	141.7	155.6	150.4	138.9	156.0
157	173.0	144.3	157.9	152.2	139.8	157.0
158	NA	147.0	160.2	154.1	140.7	158.0
159	NA	151.0	162.5	155.9	141.6	159.0
160	NA	155.5	164.8	157.8	142.5	160.0
161	NA	160.0	165.0	159.6	143.4	161.0
162	NA	164.5	165.9	161.5	144.3	162.0
163	NA	167.3	166.3	163.3	145.2	163.0
164	NA	169.9	166.8	165.0	146.2	164.0
165	NA	172.4	167.2	166.6	147.1	165.0
166	NA	NA	167.7	168.1	147.8	166.0
167	NA	NA	168.1	169.6	151.3	167.0
168	NA	NA	168.6	171.1	154.2	168.0
169	NA	NA	169.0	172.6	157.1	169.0
170	NA	NA	169.5	NA	160.0	170.0
171	NA	NA	169.9	NA	163.0	171.0
172	NA	NA	170.4	NA	165.0	172.0
173	NA	NA	170.8	NA	166.3	173.0
174	NA	NA	171.3	NA	167.3	174.0
175	NA	NA	171.7	NA	168.3	175.0
176	NA	NA	172.2	NA	169.2	176.0
177	NA	NA	172.6	NA	170.2	177.0
178	NA	NA	173.1	NA	171.2	178.0
179	NA	NA	NA	NA	172.2	179.0