

A Study of the Alignment of the NWEA RIT Scale with the New Jersey Assessment System

Deborah Adkins

March, 2007



Copyright © 2007 Northwest Evaluation Association

All rights reserved. No part of this document may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from NWEA.



Northwest Evaluation Association
5885 SW Meadows Road, Suite 200
Lake Oswego, OR 97035-3526

www.nwea.org
Tel 503-624-1951
Fax 503-639-7873

A Study of the Alignment of the NWEA RIT Scale with the New Jersey Assessment System

Deborah Adkins – Northwest Evaluation Association

March, 2007

Recently, NWEA completed a project to connect the scale of the tests used for New Jersey mathematics, and language arts literacy assessments with NWEA's RIT scale. Information from the New Jersey assessments was used in a study to establish performance-level scores on the RIT scale that would indicate a good chance of success on these tests.

To perform the analysis, we linked aggregate state test results with NWEA test results for all schools whose NWEA test count for a grade and subject was between 95% and 105% of the count tested on the state assessment. This provided assurance that only schools that had tested a very similar population on both tests were included.

The New Jersey state test is administered in spring. For the spring season, an equipercentile method was used to estimate the RIT score equivalent to each state performance level. For spring, we determined the percentage of the population within the selected study group that performed at each level on the state test and found the equivalent percentile ranges within the NWEA dataset to estimate the cut scores. For example, if 40% of the study group population in grade 3 mathematics performed below the proficient level on the state test, we would find the RIT score that would be equivalent to the 40th percentile for the study population (this would not be the same as the 40th percentile in the NWEA norms). This RIT score would be the estimated point on the NWEA RIT scale that would be equivalent to the minimum score for proficiency on the state test.

More complete documentation about this method can be found on our website.

Tables 1 through 6 show the best estimate of the RIT equivalent to each New Jersey performance level for same-season (spring) and prior-season (fall) RIT scores. These tables may be used to identify students who may need additional help to perform well on these tests.

Tables 7 through 12 show the proportion of students achieving various RIT score ranges whom we estimate would achieve a proficient score on the state assessment. These tables can be used to assist in identifying students who are not likely to pass these assessments, thereby increasing the probability that intervention strategies will be planned and implemented.

Table 1 – Recommended same-season (spring) RIT cut scores for New Jersey performance levels – Reading

Grade	Partially Proficient	Proficient		Advanced Proficient	
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<183	183	15	223	98
4	<197	197	25	229	97
5	<198	198	16	230	95
6	<208	208	27	234	93
7	<209	209	23	237	93
8	<218	218	36	243	96

Note: Grades 3 through 7 show cut score estimates for the Language Arts Literacy Score of the New Jersey Assessment of Knowledge and Skills; Grade 8 shows cut score estimates for the GEPA Language Arts Literacy test.

Table 2 – Recommended same-season (spring) RIT cut scores for New Jersey performance levels – Language Usage

Grade	Partially Proficient	Proficient		Advanced Proficient	
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<188	188	16	224	98
4	<199	199	24	228	97
5	<199	199	13	228	93
6	<210	210	28	233	95
7	<210	210	23	236	95
8	<218	218	37	241	97

Note: Grades 3 through 7 show cut score estimates for the Language Arts Literacy Score of the New Jersey Assessment of Knowledge and Skills; Grade 8 shows cut score estimates for the GEPA Language Arts Literacy test.

Table 3 – Recommended same-season (spring) RIT cut scores for New Jersey performance levels – Mathematics

Grade	Partially Proficient	Proficient		Advanced Proficient	
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<188	188	13	211	79
4	<201	201	23	219	74
5	<209	209	26	232	83
6	<220	220	40	241	87
7	<226	226	43	250	90
8	<226	226	43	255	90

Note: blue text denotes extrapolated cut score

Table 4 – Recommended prior-season (fall) RIT cut scores for New Jersey performance levels – Reading

Grade	Partially Proficient	Proficient	Advanced Proficient		
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<175	175	16	216	98
4	<191	191	25	222	97
5	<193	193	16	226	95
6	<204	204	27	230	93
7	<206	206	23	234	94
8	<215	215	36	239	96

Note: Grades 3 through 7 show cut score estimates for the Language Arts Literacy Score of the New Jersey Assessment of Knowledge and Skills; Grade 8 shows cut score estimates for the GEPA Language Arts Literacy test.

Table 5 – Recommended prior-season (fall) RIT cut scores for New Jersey performance levels – Language Usage

Grade	Partially Proficient	Proficient	Advanced Proficient		
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<179	179	16	218	98
4	<194	194	25	223	97
5	<194	194	13	225	93
6	<207	207	29	230	95
7	<208	208	23	233	95
8	<216	216	37	238	97

Note: Grades 3 through 7 show cut score estimates for the Language Arts Literacy Score of the New Jersey Assessment of Knowledge and Skills; Grade 8 shows cut score estimates for the GEPA Language Arts Literacy test.

Table 6 – Recommended prior-season (fall) RIT cut scores for New Jersey performance levels – Mathematics

Grade	Partially Proficient	Proficient		Advanced Proficient	
	Cut score	Cut score	Percentile	Cut score	Percentile
3	<179	179	14	202	80
4	<195	195	24	210	74
5	<203	203	26	224	84
6	<215	215	41	233	87
7	<222	222	44	243	90
8	<228	228	44	249	90

Note: blue text denotes extrapolated cut score

Table 7 – Proportion of students passing the New Jersey state language arts literacy assessment based on same-season (spring) reading RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
155	7%	2%	2%	1%	1%	0%
160	11%	3%	3%	1%	1%	0%
165	17%	5%	4%	2%	1%	1%
170	25%	8%	7%	3%	2%	1%
175	36%	12%	11%	4%	4%	2%
180	48%	18%	17%	7%	6%	3%
185	60%	27%	25%	11%	10%	4%
190	71%	38%	36%	17%	16%	7%
195	80%	50%	48%	25%	23%	11%
200	87%	62%	60%	36%	33%	17%
205	92%	73%	71%	48%	45%	25%
210	95%	82%	80%	60%	57%	36%
215	97%	88%	87%	71%	69%	48%
220	98%	92%	92%	80%	78%	60%
225	99%	95%	95%	87%	86%	71%
230	99%	97%	97%	92%	91%	80%
235	100%	98%	98%	95%	94%	87%
240	100%	99%	99%	97%	96%	92%
245	100%	99%	99%	98%	98%	95%

Table 8 – Proportion of students passing the the New Jersey state language arts literacy assessment based on same-season (spring) language usage RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
160	7%	2%	2%	1%	1%	0%
165	11%	4%	4%	1%	1%	1%
170	17%	6%	6%	2%	2%	1%
175	25%	10%	10%	4%	4%	2%
180	36%	16%	16%	6%	6%	3%
185	48%	23%	23%	9%	9%	4%
190	60%	33%	33%	14%	14%	7%
195	71%	45%	45%	22%	22%	11%
200	80%	57%	57%	31%	31%	17%
205	87%	69%	69%	43%	43%	25%
210	92%	78%	78%	55%	55%	36%
215	95%	86%	86%	67%	67%	48%
220	97%	91%	91%	77%	77%	60%
225	98%	94%	94%	84%	84%	71%
230	99%	96%	96%	90%	90%	80%
235	99%	98%	98%	94%	94%	87%
240	100%	99%	99%	96%	96%	92%
245	100%	99%	99%	98%	98%	95%

Table 9 – Proportion of students passing the New Jersey state mathematics assessment based on same-season (spring) mathematics RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
160	7%	2%	1%	0%	0%	0%
165	11%	3%	1%	1%	0%	0%
170	17%	5%	2%	1%	0%	0%
175	25%	8%	4%	1%	1%	1%
180	36%	13%	6%	2%	1%	1%
185	48%	20%	10%	4%	2%	2%
190	60%	29%	16%	6%	3%	3%
195	71%	40%	23%	9%	5%	5%
200	80%	52%	33%	14%	8%	8%
205	87%	64%	45%	22%	13%	13%
210	92%	75%	57%	31%	20%	20%
215	95%	83%	69%	43%	29%	29%
220	97%	89%	78%	55%	40%	40%
225	98%	93%	86%	67%	52%	52%
230	99%	96%	91%	77%	64%	64%
235	99%	97%	94%	84%	75%	75%
240	100%	98%	96%	90%	83%	83%
245	100%	99%	98%	94%	89%	89%
250	100%	99%	99%	96%	93%	93%
255	100%	100%	99%	98%	96%	96%

Table 10 – Proportion of students passing the New Jersey state language arts literacy assessment based on prior-season (fall) reading RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
145	6%	1%	1%	0%	0%	0%
150	9%	2%	2%	1%	0%	0%
155	14%	3%	3%	1%	1%	0%
160	22%	5%	4%	1%	1%	1%
165	31%	8%	7%	2%	2%	1%
170	43%	13%	11%	4%	3%	1%
175	55%	20%	17%	6%	5%	2%
180	67%	29%	25%	10%	8%	4%
185	77%	40%	36%	16%	13%	6%
190	84%	52%	48%	23%	20%	9%
195	90%	64%	60%	33%	29%	14%
200	94%	75%	71%	45%	40%	22%
205	96%	83%	80%	57%	52%	31%
210	98%	89%	87%	69%	64%	43%
215	99%	93%	92%	78%	75%	55%
220	99%	96%	95%	86%	83%	67%
225	99%	97%	97%	91%	89%	77%
230	100%	98%	98%	94%	93%	84%
235	100%	99%	99%	96%	96%	90%
240	100%	99%	99%	98%	97%	94%
245	100%	100%	100%	99%	98%	96%

Table 11 – Proportion of students passing the New Jersey state language arts literacy assessment based on prior-season (fall) language usage RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
150	6%	1%	1%	0%	0%	0%
155	10%	2%	2%	1%	1%	0%
160	16%	4%	4%	1%	1%	0%
165	23%	6%	6%	2%	2%	1%
170	33%	10%	10%	3%	3%	1%
175	45%	16%	16%	5%	4%	2%
180	57%	23%	23%	8%	7%	3%
185	69%	33%	33%	12%	11%	5%
190	78%	45%	45%	18%	17%	8%
195	86%	57%	57%	27%	25%	13%
200	91%	69%	69%	38%	36%	20%
205	94%	78%	78%	50%	48%	29%
210	96%	86%	86%	62%	60%	40%
215	98%	91%	91%	73%	71%	52%
220	99%	94%	94%	82%	80%	64%
225	99%	96%	96%	88%	87%	75%
230	99%	98%	98%	92%	92%	83%
235	100%	99%	99%	95%	95%	89%
240	100%	99%	99%	97%	97%	93%
245	100%	99%	99%	98%	98%	96%

Table 12 – Proportion of students passing the New Jersey state mathematics assessment based on prior-season (fall) mathematics RIT range

RIT Range	Percent in this range who pass					
	3	4	5	6	7	8
150	6%	1%	1%	0%	0%	0%
155	10%	2%	1%	0%	0%	0%
160	16%	4%	2%	1%	0%	0%
165	23%	6%	3%	1%	0%	0%
170	33%	9%	4%	1%	1%	0%
175	45%	14%	7%	2%	1%	1%
180	57%	22%	11%	4%	2%	1%
185	69%	31%	17%	6%	3%	2%
190	78%	43%	25%	9%	5%	3%
195	86%	55%	36%	14%	8%	4%
200	91%	67%	48%	22%	12%	7%
205	94%	77%	60%	31%	18%	11%
210	96%	84%	71%	43%	27%	17%
215	98%	90%	80%	55%	38%	25%
220	99%	94%	87%	67%	50%	36%
225	99%	96%	92%	77%	62%	48%
230	99%	98%	95%	84%	73%	60%
235	100%	99%	97%	90%	82%	71%
240	100%	99%	98%	94%	88%	80%
245	100%	99%	99%	96%	92%	87%
250	100%	100%	99%	98%	95%	92%
255	100%	100%	100%	99%	97%	95%