

Dynamic Indicators of Basic Early Literacy Skills

8th Edition

Composite Score Calculation Guide Supplement

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Introduction

This document supplements the DIBELS 8th Edition Administration and Scoring Guide. The Administration and Scoring Guide contains in depth information about the DIBELS 8th Edition Composite Score and includes an Appendix with values for all grades K-8. The Administration and Scoring Guide can be downloaded from the DIBELS Materials page.

This supplement includes special instructions for use when calculating a composite score in cases where discontinue and gating rules are utilized. This guide also includes composite score calculation worksheets that can be used to manually calculate the composite score.

Discontinue and Gating Rules Composite Score Calculation

Special rules apply to calculate the DIBELS 8 composite score when a discontinue or gating rule has been used and a student has not been administered all available subtests for their grade. In these cases a constant is used in place of the missing raw scores. The steps are the same as when calculating a regular composite score with the additional step of substituting a constant for the missing values. Example calculations are provided after the tables on the following pages.

Discontinue Rules

There are three discontinue rules that impact calculation of a composite score. In all cases, when a measure is discontinued a score of zero is given for that measure and the remaining measures are not administered.

Grade K: Beginning of Year (BOY) - If PSF is discontinued, do not administer NWF and WRF. Enter zero for PSF. Do not enter scores for the remaining subtests: NWF and WRF.

Grade K: Middle of Year (MOY) - If NWF is discontinued, do not administer WRF. Enter zero for NWF. Do not enter scores for the remaining subtest: WRF.

Grade 1: Beginning of Year (BOY) - If WRF is discontinued, do not administer ORF. Enter zero for WRF. Do not enter scores for the remaining subtest: ORF

Gating Rules

There are eight time periods across three grades where a gating rule impacts calculation of a composite score. In these cases, when a measure is not given because a student's scores are in the blue negligible risk category on the specified measures, a constant value can be used to calculate a composite score.

Grade 1: Middle of Year (MOY) and End of Year (EOY) - If the student scores in the blue range on NWF-CLS, then you do not have to administer LNF or PSF. Leave those scores blank if not administered.

Grade 2 and 3: Beginning of Year (BOY), Middle of Year (MOY), and End of Year (EOY) - If the student scores in the blue range on ORF-WRC, then you do not have to administer NWF or WRF. Leave those scores blank if not administered. Always give Maze.

Apply the following steps, in order:

1. For each subtest raw score, multiply the student's raw score by the Weight listed in the table on the next page, rounding the result to the 100ths place.

If a student does not have a subtest raw score due to the Discontinue or Gating Rules, use the constant from the table below for the missing subtest scores.

- 2. Sum the resulting weighted scores across all applicable subtests.
- 3. From that sum, subtract the Mean for the appropriate grade from the table on the next page.
- 4. Divide the result by the standard deviation (SD) for the appropriate grade in the table on the next page and round to the 100ths place.
- 5. Multiply the result by 40 and round to the ones place.
- 6. Add the scaling constant corresponding to the grade and season in which the student was tested from the table on the next page. The result is the composite score.

Note that ORF Accuracy should be represented in these calculations as a proportion of words correct (e.g., .99), rather than percent correct (e.g., 99).

	Grade	Time Period	LNF	PSF	NWF CLS	NWF WRC	WRF	ORF WRC	ORF ACC
nue	Kindorgarton	BOY (fall)			0	0	0		
contir	Kindergarten	MOY (winter)					0		
Dis	First	BOY (fall)						0	0
	First	MOY (winter)	66	56					
FIISU	TIISC	EOY (spring)	68	60					
		BOY (fall)			85	24	49		
o Se	Second	MOY (winter)			102	35	62		
Gat		EOY (spring)			116	38	69		
		BOY (fall)			120	33	59		
	Third	MOY (winter)			137	45	64		
		EOY (spring)			140	44	69		

Composite score constants for use when discontinuing or gating benchmarking

Composite Score Calculation Values K-3

Grade	Subtest score	Weight	Mean	SD	Fall constant	Winter constant	Spring constant
	LNF BOY	35.44	729	630	289	364	398
	LNF MOY/EOY	8.86					
Vindorgartan	PSF	4.13					
Kindergarten	NWF-CLS	14.93					
	NWF-WRC	3.56					
	WRF	5.62					
	LNF	10.72	3371	2251	360	400	440
	PSF	2.13					
	NWF-CLS	23.13					
First	NWF-WRC	7.79					
	WRF	13.51					
	ORF-WRC	25.36					
	ORF-ACC	0.25					
	NWF-CLS	32.74	7085	3811	360	400	440
	NWF-WRC	10.95					
Second	WRF	21.26					
Second	ORF-WRC	35.36					
	ORF-ACC	0.15					
	MAZE	4.28					
	NWF-CLS	40.02	10051	4349	360	400	440
	NWF-WRC	11.80					
Third	WRF	19.83					
mid	ORF-WRC	39.42					
	ORF-ACC	0.09					
	MAZE	4.79					

Discontinue Example

For a kindergarten student with Beginning of Year (BOY/fall) DIBELS 8 scores of 10 for LNF, 0 for PSF, and no scores for NWF-CLS, NWF-WRC, or WRF due to the discontinue rule, we would calculate this student's composite score as follows.

Step 1: Multiply each subtest raw score by the corresponding weight listed in the table. Use a zero for the missing subtest/s score/s.

Subtest score	Raw score	Weight	Weight score
LNF	10.00	* 35.44	= 354.40
PSF	0.00	* 4.13	= 0.00
NWF-CLS	0	* 14.93	= 0.00
NWF-WRC	0	* 3.56	= 0.00
WRF	0	* 5.62	= 0.00

Step 2: Sum the resulting weighted scores across all applicable subtests:

354.40 + 0.00 + 0.00 + 0.00 + 0.00 = 354.40

Step 3: Subtract from that sum the mean of the weighted scores for the appropriate grade:

Step 4: Divide that value by the standard deviation for the appropriate grade:

Step 5: Multiply that score by 40 and round to the ones place:

Step 6: Add the scaling constant corresponding to the season in which the student was tested to obtain the final composite score:

Gating Example

For a second grade student with Beginning of Year (BOY/fall) DIBELS 8 scores of 93 for ORF-WRC, 0.99 (99%) ORF-ACC, 11.5 for Maze Adjusted, and no scores for NWF-CLS, NWF-WRC, or WRF due to the gating rule, we would calculate this student's composite score as follows.

Step 1: Multiply each subtest raw score by the corresponding weight listed in the table. Use the constant values for the missing subtest/s score/s.

Subtest score	Raw score	Weight	Weight score
NWF-CLS	85	* 32.74	= 2782.90
NWF-WRC	24	* 10.95	= 262.80
WRF	49	* 21.26	= 1041.74
ORF-WRC	93.00	* 35.36	= 3288.48
ORF-ACC	0.99	* 0.15	= 0.15
Maze	11.50	* 4.28	= 49.22

Step 2: Sum the resulting weighted scores across all applicable subtests:

2782.90 + 262.80 + 1041.74 + 3288.48 + 0.15 + 49.22 = 7425.29

Step 3: Subtract from that sum the mean of the weighted scores for the appropriate grade:

Step 4: Divide that value by the standard deviation for the appropriate grade:

Step 5: Multiply that score by 40 and round to the ones place:

Step 6: Add the scaling constant corresponding to the season in which the student was tested to obtain the final composite score:

$$4 + 360 = 364$$

Composite Score Calculation Worksheets

DIBELS 8th Edition Composite Score Calculation Worksheet Kindergarten

Subtest	Raw score	Weight	Weighted score		
INE		x 35.44 if Beginning of year			
LINI		x 8.86 if Middle or End of year	=		
PSF		x 4.13	=		
NWF-CLS		x 14.93	=		
NWF-WRC		x 3.56	=		
WRF		x 5.62	=		
Step 2. Sum the weighted scores from Step 1. Total =					
Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.					
729 = (Total from Step 2)					

Step 1. Multiply each subtest raw score by the weight listed.

Step 4. Divide value from Step 3 by standard deviation.

· 630 = _____
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 289, Winter/Middle = 364, Spring/End = 398.

	+	=
(Value from Step 5)	(constant)	(final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet First Grade

Subtest	Raw score	Weight	Weighted score
LNF		x 10.72	=
PSF		x 2.13	=
NWF-CLS		x 23.13	=
NWF-WRC		x 7.79	=
WRF		x 13.51	=
ORF-WRC		x 25.36	=
ORF-ACC		x 0.25	=
Step 2. Sum the weighted	scores from Step 1.	Tot	al =

Step 1. Multiply each subtest raw score by the weight listed.

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

- 3371 = ______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

(Value from Step 3) ÷ 2251 = _____

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

	+	=
(Value from Step 5)	(constant)	(final composite score)

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DIBELS 8th Edition Composite Score Calculation Worksheet Second Grade

Subtest	Raw score	Weight	Weighted score
NWF-CLS		x 32.74	=
NWF-WRC		x 10.95	=
WRF		x 21.26	=
ORF-WRC		x 35.36	=
ORF-ACC		x 0.15	=
Maze		x 4.28	=
Ctop 2 Cure the weighted	converting them 1	Total	

Step 1. Multiply each subtest raw score by the weight listed.

Step 2. Sum the weighted scores from Step 1.

Total = _

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

- 7085 = ______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

_____ ÷ 3811 = _____ (Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

 (Value from Step 5)
 +
 =

 (constant)
 (final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet Third Grade

Subtest	Raw score	Weight	Weighted score
NWF-CLS		x 40.02	=
NWF-WRC		x 11.80	=
WRF		x 19.83	=
ORF-WRC		x 39.42	=
ORF-ACC		x 0.09	=
Maze		x 4.79	=

Step 1. Multiply each subtest raw score by the weight listed.

Step 2. Sum the weighted scores from Step 1.

Total = ___

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 10051 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

· 4349 = ______ (Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

(Value from Step 5) + _____= ______(constant) = _______

DIBELS 8th Edition Composite Score Calculation Worksheet Fourth Grade

Step 1. Multiply each subtest raw score by the weight listed.

Subtest	Raw score	Weight	Weighted score
ORF-WRC		x 36.42	=
ORF-ACC		x 0.06	=
Maze		x 6.29	=

Step 2. Sum the weighted scores from Step 1.

Total = _____

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 4563 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

_____ ÷ 1771 = _____ (Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

 (Value from Step 5)
 +
 =

 (constant)
 (final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet Fifth Grade

Step 1. Multiply each subtest raw score by the weight listed.

Subtest	Raw score	Weight	Weighted score
ORF-WRC		x 31.12	=
ORF-ACC		x 0.03	=
Maze		x 4.58	=

Step 2. Sum the weighted scores from Step 1.

Total = _____

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 4085 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

· 1299 = _____ (Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

	+	=
(Value from Step 5)	(constant)	(final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet Sixth Grade

Step 1. Multiply each subtest raw score by the weight listed.

Subtest	Raw score	Weight	Weighted score
ORF-WRC		x 40.71	=
ORF-ACC		x 0.05	=
Maze		x 5.03	=

Step 2. Sum the weighted scores from Step 1.

Total = _____

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 6087 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

(Value from Step 3) ÷ 1685 = _____

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

 (Value from Step 5)
 +
 =

 (constant)
 (final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet Seventh Grade

Step 1. Multiply each subtest raw score by the weight listed.

Subtest	Raw score	Weight	Weighted score
ORF-WRC		x 40.55	=
ORF-ACC		x 0.06	=
Maze		x 7.34	=

Step 2. Sum the weighted scores from Step 1.

Total = _____

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 6444 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

(Value from Step 3) ÷ 1960 = _____

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.

	+	=
(Value from Step 5)	(constant)	(final composite score)

DIBELS 8th Edition Composite Score Calculation Worksheet Eighth Grade

Step 1. Multiply each subtest raw score by the weight listed.

Subtest	Raw score	Weight	Weighted score
ORF-WRC		x 37.69	=
ORF-ACC		x 0.03	=
Maze		x 6.75	=

Step 2. Sum the weighted scores from Step 1.

Total = _____

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.

_____- - 4824 =______ (Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.

(Value from Step 3) ÷ 1506 = _____

Step 5. Multiply value from Step 4 by 40 and round to the ones place.

______ x 40 = _____(round to ones place) (Value from Step 4)

Step 6. Add the scaling constant for the season in which the student was tested to obtain the final composite score.

Constants: Fall/Beginning = 360, Winter/Middle = 400, Spring/End = 440.