

## Dynamic Indicators of Basic Early Literacy Skills

## 8th Edition

## Composite Score Calculation Guide Supplement

July 2020

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University of Oregon would also like to acknowledge and thank our partner Amplify Education for their work on copy editing and formatting.

## Table of Contents

Introduction. ..... 4
Discontinue and Gating Rules Composite Score Calculation ..... 5
Composite Score Calculation Worksheets ..... 10

## 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).

Composite score constants for use when discontinuing or gating benchmarking

|  | Grade | Time Period | LNF | PSF | $\begin{aligned} & \text { NWF } \\ & \text { CLS } \end{aligned}$ | NWF WRC | WRF | ORF <br> WRC | $\begin{aligned} & \text { ORF } \\ & \text { ACC } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kindergarten | BOY (fall) |  |  | 0 | 0 | 0 |  |  |
|  |  | MOY (winter) |  |  |  |  | 0 |  |  |
|  | First | BOY (fall) |  |  |  |  |  | 0 | 0 |
| First |  | MOY (winter) | 66 | 56 |  |  |  |  |  |
|  |  | EOY (spring) | 68 | 60 |  |  |  |  |  |
| $\begin{aligned} & \text { 읃 } \\ & \text { 두 } \\ & \hline \end{aligned}$ | Second | BOY (fall) |  |  | 85 | 24 | 49 |  |  |
|  |  | MOY (winter) |  |  | 102 | 35 | 62 |  |  |
|  |  | EOY (spring) |  |  | 116 | 38 | 69 |  |  |
|  | Third | BOY (fall) |  |  | 120 | 33 | 59 |  |  |
|  |  | MOY (winter) |  |  | 137 | 45 | 64 |  |  |
|  |  | EOY (spring) |  |  | 140 | 44 | 69 |  |  |

Composite Score Calculation Values K-3
$\left.\begin{array}{cccccccc}\text { Grade } & \text { Subtest score } & \text { Weight } & \text { Mean } & \text { SD } & \begin{array}{c}\text { Fall } \\ \text { constant }\end{array} & \begin{array}{c}\text { Winter } \\ \text { constant }\end{array} & \begin{array}{c}\text { Spring } \\ \text { constant }\end{array} \\ \text { LNF BOY } & 35.44 & 729 & 630 & 289 & 364 & 398\end{array}\right]$

## 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:

$$
354.40-729=-374.60
$$

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

$$
-374.60 / 630=-0.59
$$

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

$$
-0.59 * 40=-24
$$

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

$$
-24+289=265
$$

## Gating Example

For a second grade student with Beginning of Year (BOY/fall) DIBELS 8 scores of 93 for ORFWRC, 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:

$$
7425.29-7085=340.29
$$

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

$$
340.29 / 3811=0.09
$$

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

$$
0.09 * 40=4
$$

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

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

| Subtest | Raw score | Weight | Weighted score |
| :---: | :---: | :---: | :---: |
| LNF |  | $\begin{aligned} & \times 35.44 \\ & \times 8.86 \end{aligned}$ |  |
| PSF |  | x 4.13 | $=$ |
| NWF-CLS |  | x 14.93 | $=$ |
| NWF-WRC |  | x 3.56 | = |
| WRF |  | $\times 5.62$ |  |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
$\qquad$
(Total from Step 2)

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


Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\overline{\text { (Value from Step 4) }} \times 40=\ldots$ (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 $=289$, Winter/Middle $=364$, Spring/End $=398$.


DIBELS 8th Edition Composite Score Calculation Worksheet First Grade

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

| Subtest | Raw score | Weight | Weighted score |
| :---: | :---: | :---: | :---: |
| LNF |  | x 10.72 | $=$ |
| PSF |  | x 2.13 | $=$ |
| NWF-CLS |  | x 23.13 | = |
| NWF-WRC |  | $\times 7.79$ | $=$ |
| WRF |  | x 13.51 | $=$ |
| ORF-WRC |  | x 25.36 | = |
| ORF-ACC |  | $\times 0.25$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
(Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.
$\overline{\text { (Value from Step 3) }}$
$\div 2251=$ $\qquad$

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\overline{\text { (Value from Step 4) }}$ $x 40=$ $\qquad$ (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 $=440$.
$\overline{\text { (Value from Step 5) }}+{ }^{+} \quad=\overline{\text { (final composite score) }}$

DIBELS 8th Edition Composite Score Calculation Worksheet Second Grade

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

| 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 |  | $\times 0.15$ | $=$ |
| Maze | - | x 4.28 | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
$\overline{\text { (Total from Step 2) }}$ $-7085=$ $\qquad$

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\overline{\text { (Value from Step 4) }}$
$x 40=$ $\qquad$ (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 $=440$.
$\overline{\text { (Value from Step 5) }}+\frac{}{\text { (constant) }}=\overline{\text { (final composite score) }}$

DIBELS 8th Edition Composite Score Calculation Worksheet Third Grade

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

| 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 |  | $\times 0.09$ | $=$ |
| Maze |  | x 4.79 | = |

Step 2. Sum the weighted scores from Step 1.
Total = $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
(Total from Step 2) - $10051=$ $\qquad$

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\qquad$ $x 40=$ $\qquad$ (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 $=440$.
$\overline{\text { (Value from Step 5) }}+\cdots=$ (final composite score)

## 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 |  |  | $\times 36.42$ |
| ORF-ACC |  | $\times 0.06$ | $=$ |
| Maze |  | $\times 6.29$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

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

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\square$ $x 40=$ $\qquad$ (round to ones place)
(Value from Step 4) $\div 1771=$ $\qquad$

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 $=440$.
$\overline{\text { (Value from Step 5) }}+\cdots$ (constant) $=$

## 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 | - | $\times 31.12$ | $=$ |
| ORF-ACC | - | $\times 0.03$ | $=$ |
| Maze |  | $\times 4.58$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
$\qquad$
(Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\square$ $x 40=$ $\qquad$ (round to ones place)
(Value from Step 4)
$\div 1299=$ $\qquad$

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 $=440$.


## DIBELS 8th Edition Composite Score Calculation Worksheet Sixth Grade

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

| Subtext | Raw score | Weight | Weighted score |
| :--- | :--- | :---: | :--- |
| ORF-WRC |  | $\times 40.71$ | $=$ |
| ORF-ACC | - | $\times 0.05$ | $=$ |
| Maze |  | $\times 5.03$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

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

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

## (Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\square$ $x 40=$ $\qquad$ (round to ones place)
(Value from Step 4) $\div 1685=$ $\qquad$
$\qquad$ .

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 |  |  | $\times 40.55$ |
| ORF-ACC | - | $\times 0.06$ | $=$ |
| Maze |  | $\times 7.34$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
$\qquad$ $-6444=$ $\qquad$
(Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\square$ $x 40=$ $\qquad$ (round to ones place)
(Value from Step 4)
$\div 1960=$ $\qquad$

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 $=440$.
$\overline{\text { (Value from Step 5) }}+\cdots$ (constant) $\quad=$

## 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 |  |  | $\times 37.69$ |
| ORF-ACC | - | $\times 0.03$ | $=$ |
| Maze |  | $\times 6.75$ | $=$ |

Step 2. Sum the weighted scores from Step 1.
Total $=$ $\qquad$

Step 3. Subtract the mean of the weighted score from the sum of the weighted scores.
$\qquad$ $-4824=$ $\qquad$
(Total from Step 2)

Step 4. Divide value from Step 3 by standard deviation.
(Value from Step 3)

Step 5. Multiply value from Step 4 by 40 and round to the ones place.
$\square$ $x 40=$ $\qquad$ (round to ones place)
(Value from Step 4)
$\div 1506=$ $\qquad$

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 $=440$.
$\overline{\text { (Value from Step 5) }}+\cdots=\stackrel{=}{\text { (final composite score) }}$

