

Benchmark Phonics Intervention Students Outperform Peers on MAP Growth Reading Test

Implementation

During the 2022–2023 school year, a public school district in Michigan partnered with Benchmark Education Company (BEC) to implement the *Benchmark Phonics Intervention* (BPI) program as a Tier 3 support for students reading two or more years below grade level. Thirty-nine students in Grades 2–4 received BPI instruction for 66 days throughout the school year. An additional 187 eligible students participated in an alternative intervention program.

Impact

During the 2022–2023 school year, *NWEA MAP Growth® Reading* data were analyzed to compare growth among Grades 2–4 students who received *Benchmark Phonics Intervention* (BPI) with those who did not (Non-BPI). BPI students began the year nearly 13 RIT points behind their peers but demonstrated greater gains in every grade except Grade 4—where they still exceeded national growth norms. Effect sizes ranged from 1.12 to 2.31, indicating a strong instructional effect. Paired-samples t-tests revealed significant growth within both groups.

FIGURE 1. Michigan Public School District BPI and Non-BPI Students, Grades 2, 3, and 4 ($N=226$), Performance on the *NWEA MAP Growth Reading Test* from Fall 2022 to Spring 2023

| Grade | Group | N | Average Fall 2022 RIT Score (Percentile Rank) | Average Spring 2023 RIT Score (Percentile Rank) | Average RIT Growth | Expected Growth | p-value | Effect Size (d) |
|------------|---------|-----|---|---|--------------------|-----------------|---------|---------------------|
| All Grades | Non-BPI | 187 | 170.06 | 182.58 | 12.52 | N/A | <.001 | 1.23 |
| | BPI | 39 | 157.15 | 171.44 | 14.28 | | <.001 | 1.73 |
| Grade 2 | Non-BPI | 69 | 163.51 (13) | 176.65 (28) | 13.15 | 13 | <.001 | 1.46 |
| | BPI | 20 | 151.05 (8) | 168.35 (13) | 17.30 | | <.001 | 2.01 |
| Grade 3 | Non-BPI | 63 | 170.70 (16) | 180.56 (16) | 9.86 | 10 | <.001 | 1.12 |
| | BPI | 8 | 164.88 (9) | 176.88 (11) | 12.00 | | .002 | 1.71 |
| Grade 4 | Non-BPI | 55 | 177.55 (13) | 192.35 (22) | 14.80 | 8 | <.001 | 1.20 |
| | BPI | 11 | 162.64 (2) | 173.09 (3) | 10.46 | | <.001 | 1.57 |

BPI Students Make Significant Gains on Quick Phonics Assessment

During the 2022–2023 school year, 34 BPI students in Grades 2–4 completed the *Quick Phonics Assessment* (QPA) at the beginning and end of the year (see Figure 2). The QPA measures decoding skills across 13 phonics-based Skill Sets. On average, students improved from 92.44 to 142.59 points—a statistically significant gain ($p < .001$, $d = 1.64$). Students also advanced multiple skill levels, with Grade 2 students progressing from early phonics (e.g., letter sounds, CVC words) to more complex patterns.*

FIGURE 2. Michigan Public School District BPI Students, Grades 2, 3, and 4 ($N=34$)
Performance on the *Quick Phonics Assessment*, Fall 2022 to Spring 2023

| Grade | N | Points Earned BOY 2022 | Points Earned EOY 2023 | BOY Average Last Set | EOY Average Last Set |
|------------|----|---------------------------|---------------------------|-------------------------|-------------------------|
| All Grades | 34 | 92.44 | 142.59 | 4.12 | 7.12 |
| Grade 2 | 15 | 66.87 | 126.33 | 2.53 | 6.13 |
| Grade 3 | 8 | 123.00 | 173.13 | 6.13 | 8.88 |
| Grade 4 | 11 | 105.09 | 142.55 | 4.82 | 7.18 |

*Skill Sets: 1: Letter Names; 2: Letter Sounds; 3: VC and CVC; 4: Common Beginning and Ending Consonant Digraphs; 5: CVCC and CCVC; 6: Silent e; 7: r-Controlled Vowels; 8: Advanced Consonant Sounds, Silent Consonants, and Consonant Digraphs/Trigraphs; 9: Vowel Digraphs, Diphthongs, and Advanced Vowel Sounds; 10: Common Prefixes and Common Suffixes; 11: Two Syllables; 12: Three Syllables; 13: Four Syllables

BPI Students Show Growth on Quick Spelling Assessment

During the 2022–2023 school year, 34 BPI students in Grades 2–4 completed the *Quick Spelling Assessment* (QSA) at the beginning and end of the year. The QSA, which evaluates students' encoding and spelling abilities across 13 phonics-based Skill Sets, showed average gains from 68.74 to 102.88 points (see Figure 3). Students also advanced in skill level, with Grade 2 students progressing from early letter-sound patterns to more complex spelling features. A paired-samples t-test confirmed the gains were statistically significant ($p < .001$), with a large effect size ($d = 1.32$), indicating strong growth in foundational spelling and encoding skills.*

FIGURE 3. Michigan Public School District BPI Students, Grades 2, 3, and 4 (N=34)
Performance on the *Quick Spelling Assessment*, Fall 2022 to Spring 2023

| Grade | N | Points Earned BOY 2022 | Points Earned EOY 2023 | BOY Average Last Set | EOY Average Last Set |
|------------|----|---------------------------|---------------------------|-------------------------|-------------------------|
| All Grades | 34 | 68.74 | 102.88 | 3.09 | 4.85 |
| Grade 2 | 15 | 57.53 | 93.13 | 2.40 | 4.40 |
| Grade 3 | 8 | 80.50 | 116.38 | 4.38 | 5.63 |
| Grade 4 | 11 | 75.46 | 106.36 | 3.09 | 4.91 |

*Skill Sets: 1: Letter Names; 2: Letter Sounds; 3: VC and CVC; 4: Common Beginning and Ending Consonant Digraphs; 5: CVCC and CCVC; 6: Silent e; 7: r-Controlled Vowels; 8: Advanced Consonant Sounds, Silent Consonants, and Consonant Digraphs/Trigraphs; 9: Vowel Digraphs, Diphthongs, and Advanced Vowel Sounds; 10: Common Prefixes and Common Suffixes; 11: Two Syllables; 12: Three Syllables; 13: Four Syllables.

Conclusion

BEC compared the reading performance of BPI students to that of non-BPI students in a Michigan public school district, focusing on students performing two or more grade levels below expectations during the 2022–2023 school year. The results indicated that students who participated in the BPI program made statistically significant gains on the *NWEA MAP Growth Reading Test* after an average of 66 instructional days. Additionally, students showed marked improvement on the *Quick Phonics Assessment* (QPA) and the *Quick Spelling Assessment* (QSA), which reflect enhanced decoding and encoding skills. Notably, BPI students outperformed their non-BPI peers in Grades 2 and 3. Although Grade 4 students did not exceed the performance of their peers, they still surpassed expected growth benchmarks.

