FLAMINGO LITERACY MATRIX

2019-2020 EVALUATION FINDINGS OF THE UNIVERSITY OF FLORIDA LITERACY MATRIX

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Submitted to University of Florida Lastinger Center
Launched in 2018, the Literacy Matrix is a literacy-focused online professional development system that builds educators’ knowledge of how to implement evidence-based reading instruction. The Literacy Matrix is especially focused on helping educators support students not yet meeting grade-level expectations. The Literacy Matrix is comprised of seven strands: The Big Picture, Phonological Awareness, Decoding I, Decoding II, Fluency, Vocabulary, and Comprehension. Each strand includes foundational content and practical strategies in the areas of assessment, instruction, and intervention. Educators are given opportunities to apply research-based strategies and demonstrate evidence of their learning for review and feedback.

In 2019-20, 498 educators in 17 Florida school districts were invited to enroll in the Literacy Matrix. Of the 331 educators who enrolled, 37% completed one to six strands and 63% completed all strands. Before and after each strand, educators completed assessments of knowledge. Across content strands, educators' knowledge grew by over 80%, with effect sizes averaging above 2.8. Educators were required to meet 80% mastery of content as they advanced through the Literacy Matrix. At pre-assessment, 9% of educators displayed content mastery, whereas at post-assessment, 98% displayed mastery. This report will describe the Literacy Matrix, its educator users, and educators' perceptions of the Literacy Matrix.
Approved by Just Read, Florida! as a route to Reading Endorsement, the Literacy Matrix is a competency-based online professional development tool for educators to learn foundational knowledge and skills for effective reading instruction. Developed using philanthropic dollars from the James Patterson Foundation, Florida Education Foundation, and Helios Education Foundation, the Literacy Matrix is designed to increase the capacity of individual educators to teach reading effectively, diagnose reading problems, and intervene appropriately using evidence-based methods.

The Literacy Matrix is powered by a custom-built Professional Learning Management System, Flamingo Learning, and offered online. Educators progress through seven strands, as shown in Figure 1 below: The Big Picture, Phonological Awareness, Decoding I, Decoding II, Fluency, Vocabulary, and Comprehension. Within each strand, educators have opportunities to build foundational knowledge, learn how to administer and interpret student assessments, enhance their instructional practices, and provide interventions to students not yet meeting grade-level expectations. Before the COVID-19 pandemic, educators completed practicum activities to practice their skills with students in their classroom. When schools closed due to COVID-19, the Literacy Matrix team quickly created an alternative solution, case studies, which helped educators apply their knowledge and receive feedback from Literacy Matrix experts.

![Figure 1. Literacy Matrix Strands](image-url)
EDUCATORS BY THE NUMBERS

331 Educators

- All 7 Strands: 63.4%
- 1-6 Strands: 36.6%

Figure 2. Strand Completion (November 2019-December 2020)

Figure 3. Percentage of Educators Completing Each Strand
Educators began the Literacy Matrix in November 2019 and were given until the beginning of December 2020 to complete modules and case studies. Educators who completed the pre-assessment and post-assessment for each strand showed large growth. Across content strands (excluding The Big Picture, which provided an overview), educators’ average knowledge gain was 35 points, normalized gain (or educators’ gains relative to the highest possible gain) was 82%, and Cohen's \(d\) (or effect size) was 2.8 (see Figure 4). Mastery, or the percentage of educators with a score above 80, increased from less than 10% at pre-assessment to nearly 100% of educators at post-assessment (see Table 1 for details by content strand).

Table 1. Sample Sizes (\(n\)), Means (\(M\)), Standard Deviations (\(SD\)), Mastery (% > 80), and Effect Sizes (Cohen's \(d\)) by Strand for Educators Completing Pre- and Post-Assessments

<table>
<thead>
<tr>
<th>Strand</th>
<th>Sample</th>
<th>Pre-assessment</th>
<th>Post-assessment</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(n)</td>
<td>(M)</td>
<td>(SD)</td>
</tr>
<tr>
<td>Phonological Awareness</td>
<td>276</td>
<td>55.60</td>
<td>16.58</td>
<td>5.80</td>
</tr>
<tr>
<td>Decoding I</td>
<td>270</td>
<td>58.63</td>
<td>17.84</td>
<td>14.33</td>
</tr>
<tr>
<td>Decoding II</td>
<td>223</td>
<td>54.62</td>
<td>17.94</td>
<td>8.33</td>
</tr>
<tr>
<td>Fluency</td>
<td>247</td>
<td>62.57</td>
<td>16.71</td>
<td>16.91</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>234</td>
<td>50.90</td>
<td>13.80</td>
<td>3.10</td>
</tr>
<tr>
<td>Comprehension</td>
<td>234</td>
<td>59.15</td>
<td>13.70</td>
<td>6.61</td>
</tr>
<tr>
<td>Average across strands</td>
<td>247</td>
<td>56.91</td>
<td>16.10</td>
<td>9.18</td>
</tr>
</tbody>
</table>
MORE ABOUT THE EDUCATORS

Of the educators who completed at least one strand \((n = 331)\), 225 educators completed a demographic survey. Educators reported over 14 years of experience. As shown in Figure 5, most educators (71%) had experienced a traditional teacher preparation program, where they had majored in education in college. About a third (39%) had attained a master's degree. Educators generally worked with students in early elementary grades.

Figure 5. Educator Demographic Information
I strongly feel that all elementary teachers should be required to complete this program. I am a reading coach and learned so much about teaching reading and have been newly inspired to help every student reach his or her fullest potential as a reader.
SPECFIC POSITIVE FEEDBACK

Of the educators who completed the perceptions survey (n = 227), 168 educators provided open-ended feedback about features of the Literacy Matrix they liked. Educators frequently gave multiple responses, and broad categories of features they liked included content and features and support.

Content:
- Video examples of teachers working with students (42%)
- Print resources (21%), including transcripts (6%)
- Interactive activities (13%)

Features and Support:
- Ease of use (20%)
- Self-paced virtual format (18%)
- Technological features (15%)
- Staff support (10%)
## Areas of Growth & Enhancements

Of the educators who completed the perceptions survey \((n = 227)\), 147 educators provided open-ended feedback about features of the Literacy Matrix they would like to see improved. Educators frequently gave multiple responses, and broad categories of suggested improvements included technology, communication, content, and amount of time investment. The Literacy Matrix team worked diligently with educators to improve their user experience, and provided enhancements throughout the year.

<table>
<thead>
<tr>
<th>Suggested Improvements</th>
<th>Completed Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology (81% of responses), such as making improvements to the Literacy Matrix Dashboard (29%) and fixing uploading and downloading errors (16%).</td>
<td>Fixed bugs in the software, added Learning Goals to enable educators to access the Literacy Matrix based on competency need and track their own learning goals on the newly created dashboard.</td>
</tr>
<tr>
<td>Communication (36% of responses), such as providing an orientation or syllabus for the program (8%).</td>
<td>Hired over 30 Course Navigators to provide individualized communication and timely feedback. Course now includes a welcome video to orient participants and Completion Guides to describe course expectations.</td>
</tr>
<tr>
<td>Content (35% of responses), such as making changes to various activities within the Literacy Matrix.</td>
<td>Added resources to support learning and onboarded expert Literacy Navigators to assist educators through the Literacy Matrix.</td>
</tr>
<tr>
<td>Amount of time investment (21% of responses), such as reducing the time to view and complete modules (13%).</td>
<td>The amount of time investment matches the state requirement, but modules were re-created and/or streamlined to address concerns.</td>
</tr>
</tbody>
</table>
The platform is user friendly, no issues with downloads or opening things, easy to connect.

I have taught for decades, but the systematic and explicit instruction presented was so useful and taught me strategies that I hadn't been seen before. I can't wait to try the strategies with children in my classroom! Thank you!

I have learned so much through this PD. As an ESE Support teacher who works with struggling readers, I am much better prepared to meet the needs of my students in the next school year. THANK YOU...I'm kind of sad it's over.

This has been so beneficial and I have learned so much. The videos of application really helped. This training has totally changed my view of my reading instruction.

The platform is user friendly, no issues with downloads or opening things, easy to connect.